

EXHIBIT 51

1/13/22 Chasom Brown Deposition Transcript Excerpts

1 UNITED STATES DISTRICT COURT
2 NORTHERN DISTRICT OF CALIFORNIA
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5 CHASOM BROWN, WILLIAM BYATT,
6 JEREMY DAVIS, CHRISTOPHER
7 CASTILLO, and MONIQUE
8 TRUJILLO, individually and on
9 behalf of all other similarly
10 situated,

11 Plaintiffs,

12 No.

13 vs.

14 5:20-cv-03664-LHK-SVK

15 GOOGLE LLC,

16 Defendant.
17 _____/

18 VIDEOTAPED DEPOSITION OF CHASOM BROWN
19 Remote Zoom Proceedings
20 Los Angeles, California
21 Thursday, January 13, 2022
22

23 REPORTED BY:

24 LESLIE ROCKWOOD ROSAS, RPR, CSR 3462

25 Pages 1 - 208

Job No. 5028094

Page 1

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA

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JEREMY DAVIS, CHRISTOPHER
CASTILLO, and MONIQUE
TRUJILLO, individually and on
behalf of all other similarly
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Plaintiffs,

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No.

5:20-cv-03664-LHK-SVK

GOOGLE LLC,

Defendant.

_____/

Videotaped deposition of CHASOM BROWN, taken on
behalf of the Defendant, Remote Zoom Proceedings from
Los Angeles, California, beginning at 9:52 a.m. Pacific
Standard Time and ending at 5:20 p.m. Pacific Standard
Time, on Thursday, January 13, 2022, before
Leslie Rockwood Rosas, RPR, Certified Shorthand Reporter
No. 3462.

1 APPEARANCES :

2
3 FOR THE PLAINTIFFS :

4 BOIES SCHILLER FLEXNER LLP

5 BY: JAMES LEE, ESQ.

6 100 SE Second Street, Suite 2800

7 Miami, Florida 33131

8 (305) 539-8400

9 jlee@bsfllp.com

10
11 BY: HSIAO (MARK) C. MAO, ESQ.

12 44 Montgomery Street, 41st Floor

13 San Francisco, California 91401

14 (415) 293-6800

15 mmao@bsfllp.com

16
17 MORGAN & MORGAN

18 BY: RYAN MCGEE, ESQ.

19 201 North Franklin Street, 7th Floor

20 Tampa, Florida 33602

21 (813) 223-5505

22 rmcgee@forthepeople.com

23
24
25
Page 3

1 APPEARANCES (Continued):

2
3 FOR THE DEFENDANT:

4 QUINN EMANUEL URQUHART & SULLIVAN, LLP

5 BY: SARA JENKINS, ESQ.

6 TRACY XI GAO, ESQ.

7 555 Twin Dolphin Drive, 5th Floor

8 Redwood Shores, California 94065

9 (650) 801-5040

10 sarajenkins@quinnemanuel.com

11 tracygao@quinnemanuel.com

12
13
14 Also Present:

15 Scott Slater, Videographer

1 Q. BY MS. JENKINS: All right. And are there types
2 of websites where you would always object to cookies to
3 the extent that you can or types of information where you
4 would think that it's sensitive that you always want to
5 object to cookies? 10:21:02

6 A. No, I don't think I have any -- any hard lines
7 in that sense. Like generally, if I'm really concerned
8 about the content I would go into, I would go into
9 Incognito mode.

10 Q. All right. Other than Incognito mode and 10:21:23
11 sometimes objecting to cookies, are there any other
12 precautions you take to protect your privacy on the
13 internet?

14 A. Nothing's coming to mind.

15 Q. Okay. Are you in particular concerned about 10:21:39
16 information that Google collects from you as opposed to
17 other web entities that may also be collecting
18 information?

19 A. I think both. Like -- like Google obviously is,
20 you know, a juggernaut when it comes to information and 10:22:03
21 data collection, and so to a degree, I'm probably a
22 little more concerned versus some minor small website.

23 But I think in general, I think both. I'm
24 concerned about, you know, data privacy, data collection.

25 Q. What have you done to understand Google's data 10:22:26

1 collection?

2 MR. LEE: Again, Mr. Brown, I think you can
3 answer this question, but you should do it without
4 revealing any communications you've had with your
5 attorneys.

10:22:45

6 THE WITNESS: What have I done to understand
7 data collection? Probably -- well, not probably. I've
8 done some reading. And I've read like Google about some
9 items, like the Terms of Service. So I've gone through
10 and read -- more things come to me I would say than I go 10:23:08
11 seek as far as data collection, like when you're saying,
12 oh, hey, if the cookies comes up, or if like some things
13 will pop up, and then you have the opportunity to learn a
14 little bit about what you're doing, what you're reading,
15 what data is being collected and isn't. 10:23:24

16 And so I've probably been a little more vigilant
17 with looking at stuff -- you know, a lot of it's right
18 there so you can kind of see what's happening.

19 Q. BY MS. JENKINS: Prior to becoming involved in
20 this lawsuit, had you reviewed Google's disclosures about 10:23:44
21 what data it collects?

22 A. Just your -- yes.

23 Q. Do you know which disclosures you had reviewed?

24 A. Well, just in -- not the top of my head, but I
25 do -- like I've seen the Google Terms of Service. I've 10:24:09

Page 30

1 seen the privacy policy.

2 Q. And -- and did you do any outside research
3 trying to understand what data Google -- Google was
4 collecting?

5 A. Not that I recall. I mainly just went straight 10:24:34
6 to the source and went into what Google was saying.

7 Q. When you mentioned before that you had seen some
8 odd things, odd things happening with advertising, was
9 that specifically when you were browsing on the Chrome
10 browser? 10:24:55

11 A. I -- as I stated before, I don't exactly recall,
12 and I don't want to mislead you.

13 Q. And if you've already stated this, I apologize,
14 but as far as the odd things that were happening with
15 advertising, can you provide a better description of what 10:25:17
16 was happening that you considered to be odd?

17 A. You know, sometimes you get advertisements that
18 seemed tailored -- tailored to yourself, and you're
19 wondering how -- how did they -- how did they tailor that
20 to me, or is it a coincidence or that's an odd 10:25:43
21 coincidence. So -- but it was along those lines.

22 Q. Would it have been times when you had been
23 searching for something on the internet and then later
24 received advertisements for products that are related to
25 those searches that you had been performing? 10:26:02

1 A. I don't find it odd when I'm doing normal
2 searching and I get an advertisement later for that,
3 so...

4 Q. Okay. So can you help me understand in what --
5 what sort of thing you would consider odd? 10:26:25

6 A. If -- like, you know -- you know how a lot of
7 people say that, oh, we were just talking about something
8 and then all the sudden we got this ad for it. Or if I
9 was browsing something in Incognito mode and, you know, I
10 got an ad for it. Or if -- like I'm assuming through a 10:26:46
11 pattern of things that I look for, something pops up,
12 like that's just some advertising that is tailored to me
13 seemed odd. It seemed like I -- I would like to inquire
14 about this.

15 Q. You mentioned when you're browsing in Incognito 10:27:12
16 mode and you receive an ad. Do you mean that within a
17 specific Incognito session, ads that you might receive
18 within that session, you would find that odd to be
19 receiving ads, or do you mean something else?

20 A. Again, I don't recall exactly what it was, but 10:27:37
21 it was just, you know, a pattern of ads that made me
22 think, hmm, that's odd.

23 Q. Okay. Is it important for you to know what
24 information websites other than Google are collecting
25 when you're browsing the web? 10:27:57

1 like to know that.

2 Q. And do you take any action to try to determine
3 what data websites might be collecting about you?

4 A. I don't think I take any specific action to
5 know. I think I have an idea of the general things that 10:39:38
6 are collected.

7 Q. And what is that general idea?

8 A. Several identifiers about myself, my location,
9 my habits, my browsing, my preferences, my -- my IP
10 address, my -- pretty much everything -- everything about 10:40:04
11 me. The old cliché, like Google knows you better than
12 your own family; right?

13 Q. Okay. Would you expect a website other than
14 Google to put in their privacy policy if they were
15 sending any data they've collected about you to Google? 10:40:31

16 MR. LEE: Are you talking about in normal mode
17 or Incognito mode?

18 MS. JENKINS: Well, I'm just talking about in
19 general about what is on the privacy policy.

20 You can answer if you understand. 10:40:49

21 THE WITNESS: I -- I would expect there to be,
22 you know, transparency. And if they were sending data in
23 Incognito mode, yes, I would expect there to be
24 transparency to that.

25 Q. BY MS. JENKINS: Would you want a website that 10:41:14

1 you're visiting to know whether you are in Incognito mode
2 or not?

3 A. If I'm in Incognito mode, I don't want any --
4 anybody to know anything. That's the point.

5 Q. So would it be correct to say you wouldn't want 10:41:36
6 a website to know that you're in Incognito mode if you're
7 browsing that website using Incognito mode?

8 MR. LEE: Objection to the extent this is a
9 hypothetical question, it's an incomplete hypothetical.

10 THE WITNESS: I would think there would -- it's 10:42:01
11 almost like the "chicken and the egg" question you're
12 asking me, like how will they know I'm in Incognito mode
13 unless they know I'm in Incognito mode.

14 I don't know -- like I guess my answer is: I
15 don't want -- in Incognito mode, I don't want anybody to 10:42:17
16 know anything about me. That's why I go into Incognito
17 mode.

18 The technicals of how that can happen I'm sure
19 are figured out or could be figured out. But I feel like
20 I would go on this weird like feedback loop if it's -- 10:42:37
21 like I feel like it's a "chicken and the egg" question a
22 little bit.

23 Q. BY MS. JENKINS: All right. How frequently do
24 you visit the Redfin website?

25 A. Maybe once a month. 10:42:59

1 Q. And how frequently do you visit that website
2 using Incognito mode?

3 A. I don't know exactly. I guess that would be
4 if -- yeah, I don't know exactly.

5 Q. Do you believe you have visited that website 10:43:22
6 using Incognito mode?

7 A. Yeah, I believe I have.

8 Q. You've read the Redfin privacy policy?

9 A. Yeah, I'm sure -- I'm sure it's come up.

10 Q. When you read privacy policies, do you pay 10:43:41
11 special attention to the section discussing what
12 information is collected about you?

13 MR. LEE: Objection to "special attention,"
14 vague.

15 THE WITNESS: Yeah, I -- I pay attention to if 10:44:09
16 they're -- like generally I would like to know what
17 they're collecting or not, and I would like to know if --
18 and I haven't seen it, but I would like -- I would like
19 to know if they are sending data and it's being
20 collected. But let me rephrase that. 10:44:37

21 I would like to know -- like can you repeat the
22 question? I'm losing myself here trying to answer this.

23 Q. BY MS. JENKINS: The question was when you read
24 privacy policies, do you pay special attention to the
25 section discussing what information is being collected 10:44:53

1 about you?

2 A. I wouldn't say I pay special attention. I
3 was -- I read it as I would read, you know, any privacy
4 policy.

5 Q. When you read privacy policies, do you generally 10:45:10
6 read the whole thing?

7 A. Generally, no. Generally, I'll peruse them. So
8 certain things will catch your eye.

9 Q. And what sorts of information are you generally
10 looking for as you peruse the privacy policy? 10:45:30

11 A. Just anything that -- that stands out, like I
12 don't look for anything in particular, but you -- you
13 know, I'm not like this privacy policy -- like very anal
14 about I look at every privacy policy and I read it down
15 to every word and like analyze it and -- because there's 10:45:56
16 a lot of like legal mumbo-jumbo in there, too.

17 So it's a matter of -- you know, I look at it
18 generally for what it is, and if anything stands out that
19 seems odd to me, then maybe I'll read further or look
20 into it further. 10:46:14

21 Q. Have you ever decided to stop visiting a website
22 after reading its privacy policy?

23 A. Sure, yeah.

24 Q. And which -- can you name one of those websites?

25 A. No. I don't recall a specific website. Just 10:46:30

1 there has been a couple times where I saw something, and
2 I'm like that's some bullshit, and I'm not even going on
3 this site. This seems like way too -- way too intrusive.

4 So there has been times like that. I just --

5 the websites, clearly I don't visit them very often. 10:46:50

6 Q. Do you remember the terms that you saw that made
7 you think that you no longer wanted to visit that
8 website?

9 A. I don't recall specifically what they were.

10	Q. Okay.	10:47:07
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11 A. But sometimes you'll see some language when, you
12 know, a privacy policy is being very transparent, and
13 you're like, wow, that -- no, no, thank you. I'm out
14 (indicating).

15 Q. Okay. Do you also review privacy policies for 10:47:22

16 the apps that you use?

17	A. Sometimes.
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18 Q. And do you review them in the same way you've
19 described reviewing the privacy policies for websites?

20 A. Yes, yeah, I would say, yeah. 10:47:40

21 Q. All right. I think we're -- I'm going to
22 introduce the first exhibit today. So I don't know -- I
23 don't believe you've used this Exhibit Share before, but
24 if you go to that folder, you may need to refresh the
25 first exhibit. 10:48:03

1 (Exhibit 1, Redfin Privacy Notice, was marked
2 for identification by counsel electronically.)

3 Q. BY MS. JENKINS: It looks like it is there. If
4 you could open that up.

5 A. Okay. I clicked refresh. It says Exhibit 10:48:11
6 Number 1.

7 Q. Okay.

8 A. Redfin Privacy Policy.

9 Q. Okay.

10 A. Would you like me to click on that and open it? 10:48:21

11 Q. Yes. Please open it.

12 Do you recall if you've ever seen this privacy
13 policy before?

14 MR. LEE: Do you want him to answer that without
15 reading the document? 10:48:44

16 Q. BY MS. JENKINS: No, no. You can take your time
17 to take a look at the document.

18 A. Yeah, I'm -- I'm just reviewing it.

19 It looks vaguely familiar.

20 Q. Okay. So I believe you testified earlier that 10:49:05
21 you had -- you had at some point reviewed Redfin's
22 privacy policy. Is it safe to say that this would be the
23 privacy policy that you reviewed?

24 A. Well, when I did, I didn't take a photographic
25 memory of it. So that's why it's -- and I wouldn't 10:49:27

1 necessarily see it like the way I'm seeing it right now.

2 That's why it's kind of odd, let's say.

3 But this -- this appears to be the Redfin

4 privacy policy, and it's probably what I saw.

5 Q. All right. Could -- could you please turn to or 10:49:46

6 scroll down to page 4 where it says 4 out of 18 at the

7 bottom. And at the bottom of that, Section N, where it

8 says: "Information We Collect Automatically."

9 Could you please read aloud that paragraph.

10 A. "We may collect certain information 10:50:11

11 automatically when you use the Services. The information

12 may include your Internet protocol (IP) address, user

13 settings, IMEI, MAC address, cookie identifiers, mobile

14 carrier, mobile advertising, and other unique

15 identifiers, details about your browser, operating system 10:50:29

16 or device, location information, Internet service

17 provider, pages that you visit before, during, and after

18 using the Services, information about the links" -- "the

19 links you click, and other information about how you use

20 the services. Information we collect may be associated 10:50:50

21 with accounts and other devices."

22 Q. Is it okay with you that Redfin is collecting

23 that data?

24 A. Yeah, I understand that Redfin's collecting that

25 data. 10:51:11

1 Q. And do you consider any of that data to be your
2 personal information?

3 A. Isn't it all my personal information? Or to
4 answer your question, yes, it's all my information. I --
5 like my device, my location, who I choose as my internet 10:51:32
6 provider, pages that I've visited before. So that means
7 other websites I've gone to. Yeah, that's my personal
8 information.

9 Q. Would you be all right if Redfin was not
10 collecting this data itself but was using another company 10:51:53
11 or service to collect the data?

12 MR. LEE: Are we talking about regular mode or
13 Incognito mode? I'm a little confused.

14 MS. JENKINS: Well, I mean, this is the Redfin
15 policy so it -- it doesn't distinguish. 10:52:16

16 THE WITNESS: Yeah. So -- so if it doesn't
17 distinguish, which it seems it doesn't, then it would be
18 based on when I'm viewing it. So I would care if I'm
19 viewing it in a -- you know, at a time that is more
20 private. And so if I was in Incognito mode, then, you 10:52:44
21 know, I would care. And depending on like what they're
22 doing with that, who they're giving it to, and
23 specifically, if they're giving it to Google when I'm in
24 Incognito mode, yeah, I would care about that. Of
25 course. Because I specifically would go into Incognito 10:53:05

1 to be collected. There's times I understand that. And
2 then there's times that I want it more private.

3 And so, again, context matters. Would I visit
4 the website? Yes, in certain situations and under
5 certain circumstances. 11:21:23

6 If the darned Google Incognito button really did
7 what it's supposed to do and what it says it's supposed
8 to do, then I can go on there worry free.

9 Q. What would you consider to be personal user
10 data? 11:21:43

11 A. Personal user data. Well, that is in all the --
12 you know, the information about myself, my use, my
13 location, my habits, my preferences. What I do before I
14 go to a website, what I do after I go to a website. What
15 color hair I prefer on a woman. Like all of that seems 11:22:08
16 to be personal data.

17 Q. Would it be fair to say that to be personal user
18 data, it would need to be data that is linked to you?

19 MR. LEE: Objection to form, asked and answered.

20 You can answer. 11:22:32

21 THE WITNESS: I believe it's all linked to me.

22 Q. BY MS. JENKINS: But if -- if a piece of data
23 were not linked --

24 A. I guess I would need to understand how you
25 disassociate everything about me from me. 11:22:45

1 MR. LEE: Did we lose, Sara?

2 MS. JENKINS: No, sorry. I'm just looking back
3 at a question.

4 MR. LEE: Okay.

5 Q. BY MS. JENKINS: All right. What -- what 11:23:08
6 information would you consider to be sensitive user data?

7 MR. LEE: Objection to form.

8 THE WITNESS: Anything where I click on the
9 Incognito mode now becomes sensitive user data. Because
10 I'm saying this is off limits. So any data from that 11:23:26
11 point forward is now sensitive user data. And it's
12 basically because I'm saying, look, I don't -- this --
13 this part of it, I don't want you to hear, see. Like
14 this is my private information. So it's all sensitive.

15 Q. BY MS. JENKINS: So, for example, if you were to 11:23:53
16 visit the Redfin website in regular mode, you would not
17 consider that to be sensitive, but if you are using
18 Incognito mode, that same visit you would consider to be
19 sensitive user data?

20 A. Yes, I would. Because I'm there -- I'm saying 11:24:13
21 that -- if I just said something normally to somebody,
22 then that's one thing. But if I, you know what, say,
23 hey, this is a -- this is a secret, then I'm putting up a
24 sign saying, hey, this is private, this is sensitive.

25 So it -- it doesn't really matter actually the 11:24:33

1 website that I'm going to; it matters the context. Am I
2 deciding is this going to be private or not? And because
3 I understand that, hey, if I go do normal browsing, I'm
4 doing normal browsing and I'm giving up data and -- an my
5 data's being collected, and that's the deal we have. 11:24:53

6 But when I go into Incognito mode, hey, the deal
7 we have is, no, Google's not to be collecting my data.
8 So that's how it matters.

9 Q. Have you -- okay. Sorry to interrupt you.

10 Have you used other browsers' private browsing 11:25:12
11 modes?

12 A. I think I've tried one -- one or maybe two at
13 some point. But -- oh, sorry. Sorry to interrupt.

14 Q. No, you go ahead and finish your answer.

15 A. But it -- yeah, I -- I tried one or two at some 11:25:34
16 point. Because I did find it interesting that, oh, they
17 have a private browsing mode as well.

18 Q. And you've tried Microsoft's private browsing
19 mode; is that correct?

20 A. I don't recall Microsoft's. 11:26:03

21 Q. Which private browsing modes do you recall
22 using?

23 A. I believe it was on Safari one time, and then
24 I'd have to recall what the other browsers that are out
25 there. Because I -- like 99.9 percent of what I do is 11:26:29

1 on -- on Google Chrome. So I don't really use the other
2 browsers very often.

3 I do -- the reason why I'm saying yes is I do
4 remember being prompted on some other browser that, hey,
5 there's a -- there's a -- I don't think they called it 11:26:48
6 Incognito mode. I don't even recall what they called it.
7 But it was a -- saying, hey, there's a private browsing
8 mode here.

9 And so I do recall clicking on one of them. I
10 think it was Safari. 11:27:02

11 Q. Do you believe that Google will be receiving
12 data from the Redfin website if you browse using Safari's
13 private browsing mode?

14 A. Do I think that Google will be...

15 Yeah, I guess that's possible. 11:27:29

16 Q. And does that cause you concern?

17 A. No, because I -- like even when I clicked on it,
18 I didn't even -- I don't even think I went to a website.
19 I just clicked on it to open it because it was -- it was
20 prompted to me. So I don't have any concerns because, 11:27:49
21 again, 99.9 percent of what I do is on Google, and Google
22 has Incognito mode.

23 Q. Do you consider sensitive user data and personal
24 information to be the same thing?

25 A. Yeah, I think they're -- they're synonymous. It 11:28:20

1 MR. LEE: Objection. Lack of foundation.

2 THE WITNESS: Yeah. Chrome is normal browsing
3 with traditional data collection. Incognito mode is a
4 private browsing mode that doesn't -- where Google does
5 not collect your data. 12:36:23

6 Q. BY MS. JENKINS: Apart from the Chrome mode of
7 Incognito, do you know what the term "incognito" means?

8 A. Yeah, hidden. Like it's probably synonymous
9 with invisible.

10 Q. You think that "incognito" and "invisible" are 12:36:58
11 the same?

12 A. Yeah. Well, yes, I think "incognito" means it's
13 probably closer to hidden, but both. It's like if I were
14 to define it, that would probably -- say something like
15 that. Yes, I assume it to be not seen, hidden, you know, 12:37:20
16 like something like that.

17 Q. Prior to taking part in this case, did you think
18 that Incognito mode would completely conceal your
19 internet activity from everyone?

20 A. From Google. 12:37:44

21 Q. Does that mean there are other parties that you
22 didn't have that expectation for?

23 A. Yes, because I don't believe that Google
24 can control like everything outside of Google. I
25 don't -- yeah, I -- I don't really know the 12:38:10

1 technicalities of that, but I -- I could -- I think
2 that's reasonable to think.

3 Q. And you can -- sorry. My -- pardon me. My
4 light is on a motion detector. It thinks I'm not here.

5 Even since this case started, is it -- it's true 12:38:33
6 that you've continued to use Chrome as your main browser;
7 is that right?

8 A. Yes.

9 Q. And have you continued to use Incognito mode
10 since the case started? 12:38:44

11 A. I have.

12 Q. So you've continued to use Incognito mode
13 despite the fact that you now have the understanding that
14 Google is receiving personal information when you're
15 using Incognito mode. 12:39:05

16 Is that true?

17 MR. LEE: Objection to form.

18 THE WITNESS: Yes, that is true. And obviously,
19 a lot more has come to light about what it is. And so
20 I'm very skeptical of it now. But I think it was prudent 12:39:20
21 to not change my behavior and habits so we can get, you
22 know, a good idea of what's going on.

23 Q. BY MS. JENKINS: Can you explain further why --
24 why wouldn't you want to change your behavior or habits?

25 A. Because I just got involved in a lawsuit with 12:39:45

1 Google. Yes, I wouldn't want to change my habits when it
2 pertains to my habits.

3 MS. JENKINS: All right. I'm moving onto a
4 different topic now. So if people would like to break
5 for lunch, I'm happy to do it, or we can continue on for 12:40:13
6 a bit, if you want.

7 MR. LEE: Obviously, I'll defer to Chasom, but
8 it might help in our decision making if we get a sense of
9 how close we are to the finish line.

10 If it's going to be a lot more, then I think we 12:40:25
11 should just take lunch. If you think you can power
12 through, then we'll talk about it.

13 MS. JENKINS: I don't -- I do not think we'll
14 power through without taking a lunch. So maybe we take
15 lunch now and -- do you want to take 30 minutes? Does 12:40:38
16 that work for you?

17 MR. LEE: Let's take 40 and get back on the
18 record in 40.

19 MS. JENKINS: All right.

20 THE REPORTER: Off the record. 12:40:55

21 THE VIDEOGRAPHER: We are -- we are off the
22 record. The time is 12:41 p.m.

23 (Recess.)

24 THE VIDEOGRAPHER: We are back on the record.

25 The time is 1:29 p.m. 13:29:03

1 A. Well, fortunately, I don't have to just read
2 those two sentences. I get to read the document, and in
3 the document, I think it gives the vehicle, which is the
4 Incognito mode. So it's -- like in these two sentences,
5 it's basically saying, hey, you're trusting us with your 13:54:32
6 information. You're in control. And then I can't leave
7 out that, hey, here's the way that you're in control
8 through -- browse the web privately using Chrome in
9 Incognito mode.

10 So I look at the document as a whole. I 13:54:50
11 wouldn't want to just make an interpretation of a privacy
12 policy, and I certainly didn't do that when I read it,
13 that, hey, I'll read these first two sentences and now
14 I -- now I know.

15 So I think I know by the document itself. 13:55:04

16 Q. So other than the two places that you have
17 highlighted, do you see anywhere else in this document
18 that you believe where Google represented that you could
19 control what information Google collects by enabling
20 private browsing mode? 13:55:29

21 A. I think if they put it somewhere else in it, it
22 would be redundant. But I'm perusing the document to see
23 if anything stands out or -- or I recall. Bear with me
24 just a moment.

25 Yeah, like I'm just taking a glimpse at the 13:55:56

1 entirety of the document, and those -- I think those
2 statements say enough. And fortunately, they're right on
3 the first page so I get the main information that I need,
4 easily accessible.

5 Q. Can you turn to page 2 of the privacy policy. 13:56:10

6 A. Yes.

7 Q. Do you see the heading where it says:
8 "Information we collect as you use our services"?

9 A. Bear with me. I'm getting to page 2.

10 Okay. "Information we collect as we (sic) use 13:56:31
11 our services." Yes, I see it.

12 Q. And do you remember whether you reviewed this
13 section of the privacy policy when you first opened your
14 Google account?

15 A. When I -- when I first opened it ten years ago? 13:56:43
16 I don't recall if I read this or not.

17 MR. LEE: Counsel, are you representing that
18 this was the privacy policy when he opened his account?

19 MS. JENKINS: I am not. I gave you the
20 effective date. I'm asking if he remembers if he read 13:57:03
21 this back then. I can ask another question.

22 Q. Do you remember reading this prior to this
23 litigation?

24 A. Yes.

25 Q. And can you please read aloud the second 13:57:20

Page 111

1 paragraph there.

2 A. All right.

3 "The information we collect includes unique
4 identifiers, browser type and settings, device type and
5 settings, operating system, mobile network information, 13:57:31
6 including carrier name and phone number, and application
7 version number. We also collect information about the
8 interaction of your apps, browsers, and devices with our
9 services, including IP addresses, crash reports, system
10 activity, and the date" -- "the date, time, and referrer 13:57:50
11 URL of your request."

12 Q. So this tells you that Google collects all of
13 the information that you just read when you browse a
14 website that uses Google services; right?

15 A. "The information we collect includes unique 13:58:14
16 identifiers." It's saying that they -- Google collects
17 data in that paragraph.

18 Q. And it does not tell you that private browsing
19 or Incognito mode would prevent Google from receiving
20 this data; right? 13:58:30

21 A. No. They told me that on the first page. They
22 don't need to put it on the second page.

23 Q. All right. Can we turn to the -- the -- I
24 believe you've already answered this, but I think you
25 stated that you did not see any other places in the 13:58:48

Page 112

1 privacy policy that would have caused you to believe that
2 Google is not collecting user -- your information when
3 you're browsing privately other than the two places that
4 you indicated; is that right?

5 MR. LEE: Objection. Mischaracterizes his prior 13:59:04
6 testimony. He indicated three places.

7 THE WITNESS: Yes. In the -- the three places I
8 indicated, I think that is sufficient, and nothing else
9 stands out.

10 Q. BY MS. JENKINS: All right. I'm sorry, 13:59:22
11 Mr. Brown, but I've only -- I'm remembering two places,
12 which is the first two sentences, and then the paragraph
13 after the bullets. Can you remind me what the third
14 section was, please?

15 A. Oh, oh, sure. I was just indicating two 13:59:33
16 different places in that paragraph.

17 Q. Okay.

18 A. So in particular, the -- the first sentence and
19 the last two sentences --

20 Q. Okay. 13:59:45

21 A. -- of that paragraph.

22 Q. All right. Thank you.

23 MS. JENKINS: Tracy, can you please load up the
24 Chrome privacy notice.

25 (Exhibit 7, Google Chrome Privacy Notice, 13:59:51

1 THE WITNESS: I'm seeing -- oh, okay. I see
2 what you mean now. Let me find the that. Here we go.
3 Let me zoom out.

4 Now I got it. Sorry about that.

5 Q. BY MS. JENKINS: All right. And have you 14:13:14
6 reviewed this Chrome Incognito notice before?

7 A. I think I see it every time I go into Incognito.

8 Q. Do you remember approximately when the first
9 time is that you would have seen the Incognito notice?

10 A. I don't know if it was the exact same when it 14:13:39
11 happened, but it looks -- yeah, it seems to have the same
12 look and feel that it's -- that it's always had since the
13 beginning, and this is the -- you know, the first screen
14 you see when you go into Incognito mode.

15 Q. All right. Can you look kind of in the middle 14:13:58
16 of that -- the pop-up page where it says: "Chrome won't
17 save the following information." Can you read the
18 bullets underneath that.

19 A. "Chrome won't save the following information:
20 Your browsing history, cookies, and site data, 14:14:14
21 information entered in forms."

22 Q. And can you also read the -- the other side
23 which says: "Your activity might still be visible to."

24 A. "Your activity might still be visible to:
25 Websites you visit, your employer or school, your 14:14:30

1 internet service provider."

2 Q. Based on this notice, do you think it's clear
3 that when you're using Incognito mode, your activity
4 could still be visible to your employer?

5 A. That my activity can still be visible to my 14:14:50
6 employer? Yes, I think that's possible.

7 Q. And also that your activity could be visible to
8 your school?

9 A. Yes, it says that.

10 Q. Are you contending with this lawsuit that 14:15:06
11 Incognito mode has acted -- sorry, strike that one
12 second.

13 I'll move on.

14 And is it clear to you from this that your
15 internet activity could still be visible to your internet 14:15:25
16 service provider?

17 A. Yeah. Yes, I see that.

18 Q. And is it clear to you that your activity might
19 be visible to websites that you visit?

20 A. Yes, it says that. 14:15:44

21 Q. Do you understand that the websites that you
22 visit could be sharing your information with other
23 service providers?

24 MR. LEE: Objection to form. Are you asking
25 whether it says that? 14:15:55

1 MS. JENKINS: No.

2 THE WITNESS: So, well, it's like -- it's my
3 understanding that when I go into Incognito mode, that
4 Google takes the proper steps to protect and not collect
5 my data. 14:16:17

6 So, again, and like we've talked about this in
7 another question before, like some other websites, like I
8 don't know if Google completely controls them or not. I
9 don't see how they would, but I do think Google has
10 complete control over, you know, itself and also all of 14:16:34
11 its services that it provides.

12 So I think anything related to Google in
13 Incognito mode is protected, not collected. I think
14 that's clear by the -- by this screen, by the large words
15 that you've gone Incognito, by, you know, the invisible 14:16:56
16 spy man on top. By -- like this is the opening screen.
17 It's showing you that you are private. Your stuff is not
18 being collected. You're now safe. Google now is
19 protecting and not collecting your data and keeping your
20 browsing private as much as Google has control over it. 14:17:21

21 Q. Do you understand that the websites you visit,
22 that could include a website like Google.com?

23 A. I understand that I can visit Google.com in
24 Incognito mode.

25 Q. And do you understand that then, according to 14:17:45

1 THE VIDEOGRAPHER: I can get it for you, yes.

2 MS. JENKINS: At the break is fine. Thank you.

3 Q. All right. Mr. Brown, could you open what's
4 been marked as Exhibit Number 9.

5 MR. LEE: Mr. Brown, it's a short document. Why 14:24:41
6 don't you read the whole thing.

7 THE WITNESS: If you guys don't mind, just give
8 me a moment.

9 Okay. I think I have the gist of it.

10 Q. BY MS. JENKINS: All right. Have you -- have 14:25:28
11 you ever seen this page before?

12 A. I -- I don't recall. I don't have a specific
13 memory of it.

14 Q. Could you take a look at page 1. In the middle
15 of the page, it says: "Your activity might still be 14:25:48
16 visible."

17 MR. LEE: Do I have a standing objection to this
18 exhibit based on lack of foundation?

19 MS. JENKINS: Yes.

20 Q. And could you read what it says under: "Your 14:26:05
21 activity might still be visible."

22 A. "Incognito mode stops Chrome from saving your
23 browsing activity to your local history. Your activity,
24 like your location, might still be visible to: Websites
25 you visit, including the ads and resources used on those 14:26:25

Page 127

1 sites; websites you sign in to; your employer, school, or
2 whoever runs the net you're using; your internet service
3 provider; search engines: Search engines may show search
4 suggestions based on your location or activity in your
5 current Incognito browsing session. When you search on 14:26:45
6 Google, Google will always estimate the general area that
7 you're searching from. Learn more about location when
8 you search on Google."

9 Q. If you had read this -- this page previously,
10 you'd understand that in Incognito mode, your browsing 14:27:07
11 and activity data could still be visible to the websites
12 you visit as well as their service providers; is that
13 right?

14 MR. LEE: Objection to form.

15 THE WITNESS: I -- I would read this as certain 14:27:20
16 information outside the purview of Google, Google cannot
17 completely control, and they -- they may get information.

18 Q. BY MS. JENKINS: If you look at the first bullet
19 in this section that says "websites you visit, including
20 the ads and resources used on those sites," what is your 14:27:44
21 understanding of the meaning of the ads and resources
22 used on those sites?

23 A. Well, I don't know what ads and resources on --
24 on websites usually use. Fortunately, if I am in
25 Incognito mode, Google has a lot of ads on web pages, and 14:28:07

1 so I would be protected if those ads and resources had
2 anything to do with Google, but they may not have to do
3 with Google. Again, I don't know like any given website.

4 Q. But from the description here, it doesn't say
5 that the ads and resources that are used on that site are 14:28:33
6 not affiliated with Google, does it?

7 A. It doesn't say it right here, but it doesn't
8 have to because Google has already made the Google
9 promise in their privacy policy. Google has said that,
10 hey, with Google and our services, you're private, you're 14:28:58
11 protected.

12 So in this case, I would hope it's a Google ad
13 or resource because then Google should be protecting me
14 per what they're telling me. So -- so they don't need to
15 say that. 14:29:18

16 Sorry if I interrupted you.

17 Q. No, it's all right.

18 Protecting you from -- from what?

19 A. They're protecting my privacy.

20 MS. JENKINS: Okay. All right. James, do you 14:29:33
21 want to take a quick break now? That would be all right.

22 MR. LEE: Great. Thanks. Back in ten?

23 MS. JENKINS: Sure.

24 THE VIDEOGRAPHER: We are off the record. The
25 time is 2:30 p.m. 14:29:43

1 Google's conduct?

2 A. I don't believe I lost any property.

3 Q. Have you ever purchased any products as a result
4 of digital advertisements that you believe were targeted
5 by Google? 15:28:24

6 A. I -- yeah, I've purchased products online
7 through targeted advertising. It was most likely Google.
8 I didn't really take the time to figure out where it was,
9 but yes, very much most likely by Google. And I could
10 probably, you know, look at the search or something like 15:28:45
11 that to figure out that.

12 But, yeah, the short version of that long-winded
13 horrible answer is yes, I've -- I've purchased product
14 from targeted advertising.

15 Q. Are you aware that many free services and 15:29:00
16 content on the internet are paid for by advertising?

17 A. Yeah, I'm aware. I'm aware.

18 Q. And you understand that includes targeted
19 advertising?

20 A. Yeah. 15:29:18

21 Q. And do you generally understand that users' data
22 is being used for targeted advertising?

23 A. Yeah.

24 Q. And you've seen tailored ads when you've been
25 using Chrome; correct? 15:29:39

Page 157

1 A. Yeah.

2 Q. What is your opinion about targeted advertising?

3 MR. LEE: In normal mode?

4 MS. JENKINS: We can say in normal mode. I was
5 looking for a general opinion about targeted advertising. 15:29:54

6 THE WITNESS: I'll do you one better. I'll do
7 all three: General, normal mode, and Incognito.

8 Well, yeah, just in general, I think targeted
9 advertising is a good thing. And normal browsing mode, I
10 think that, again, it's I've given consent. We have a 15:30:18
11 deal. I get the deal. Thank you for showing me, you
12 know, a -- the surfboard I like.

13 And then when I'm in -- when I'm not in
14 Incognito mode -- or I'm sorry, when I am in Incognito
15 mode, I don't think that that's appropriate because you 15:30:37
16 shouldn't be collecting anything about me. I'm supposed
17 to be hidden. I'm supposed to be incognito. I'm
18 supposed to be an invisible spy guy. That's why I click
19 on the button.

20 And so I think anything along those lines is 15:30:57
21 inappropriate at minimum and, you know, a breach in our
22 deal otherwise.

23 Q. BY MS. JENKINS: Sometimes Chrome will suggest
24 searches for you when you start typing into the search
25 bar. Are you familiar with that? 15:31:16

1 A. I am.

2 Q. Do you think that is a helpful feature?

3 A. Yeah, it's helpful.

4 Q. And have you taken steps to disable that

5 feature, ever? 15:31:31

6 MR. LEE: Go ahead and answer if you can.

7 THE WITNESS: In -- no, I haven't taken any

8 steps to disable that feature outside of if I go in

9 Incognito mode, I wouldn't think they would be predicting

10 what I'm about to text because they shouldn't know 15:31:51

11 anything about me.

12 Q. BY MS. JENKINS: Have you ever noticed that it

13 was providing you with suggestions when you were

14 searching in Incognito mode?

15 A. I don't have a particular recollection of that. 15:32:08

16 Q. Are you aware that the suggestions that it makes

17 are sometimes -- I'm talking about in non -- in regular

18 mode --

19 A. Okay.

20 Q. -- are based on previous searches that you've 15:32:31

21 done?

22 A. Yeah, that makes sense.

23 Q. Do you currently use your Gmail accounts?

24 A. I do currently use my Gmail accounts.

25 Q. And I believe you disclosed to us three 15:32:51

1 STATE OF CALIFORNIA) ss:

2 COUNTY OF MARIN)

3
4 I, LESLIE ROCKWOOD ROSAS, RPR, CSR NO. 3462, do
5 hereby certify:

6 That the foregoing deposition testimony was
7 taken before me at the time and place therein set forth
8 and at which time the witness was administered the oath;

9 That testimony of the witness and all objections
10 made by counsel at the time of the examination were
11 recorded stenographically by me, and were thereafter
12 transcribed under my direction and supervision, and that
13 the foregoing pages contain a full, true and accurate
14 record of all proceedings and testimony to the best of my
15 skill and ability.

16 I further certify that I am neither counsel for
17 any party to said action, nor am I related to any party
18 to said action, nor am I in any way interested in the
19 outcome thereof.

20 IN WITNESS WHEREOF, I have subscribed my name
21 this 17th day of January, 2022.

22
23
24 

25 LESLIE ROCKWOOD ROSAS, RPR, CSR NO. 3462

EXHIBIT 52

Redfin Privacy Policy (Brown Ex. 1)



Redfin Privacy Notice

Effective Date: January 1, 2020

This Privacy Notice applies to Personal Information processed by Redfin in the course of our business, including, Redfin.com, Redfin.ca, the Redfin Applications, as well as additional sites/applications operated by our affiliates and subsidiaries, including Redfin Mortgage, Redfin Now, Redfin Direct, Walkscore, and Title Forward (each a "**Site**") and the services provided through the Sites (collectively with the Sites, the "**Services**").

The terms "**Redfin**," "**we**," "**us**," and "**our**" includes Redfin Corporation and our affiliates and subsidiaries (including, without limitation, Redfin Unlimited Liability Company for individuals located in Canada).

Please note that unless we define a term in this Privacy Notice, capitalized terms used in this Privacy Notice have the same meanings as in our [Terms of Use](#).

This Privacy Notice contains the following sections:

1. Personal Information Collection and Use
2. Personal Information Sharing
3. Your Choices
4. Individual Rights in Personal Information
5. Personal Information Retention
6. Personal Information Storage and Security
7. Other Important Information

**Exhibit
GO- 0001**

1/13/2022
Chasom Brown - V1

1. Personal Information Collection and Use

This Privacy Notice covers our use of Personal Information. "**Personal Information**," means any information that relates to you and can -- either on its own or in combination with other information -- identify you as an individual. Personal information does not include information that has been de-identified or aggregated such that you can no longer be identified.

The types of information we collect depends on your level of engagement with the Services. The more you interact with the Services, the more information we need to provide the Services. This Section explains how we collect and use personal information based on your level of engagement with the Services.

A. All Users of the Redfin Sites

From registered and unregistered users of the Sites, we automatically receive and record information whenever you interact with the Sites. This includes IP address data from our server logs, cookie information, browser information, information about your activity while on the Sites (such as the pages you request, properties that you view or save, and property that you claim), and the URL of the site you came to the Sites from. We also may collect the mobile device ID (such as the ID for Advertising on iOS and Android ID on Android) from users of the Redfin Applications. If permitted by the settings on your device and/or with your consent, we will also collect your geo-location information. We use this to provide you with location specific information, such as homes for sale near your current location as determined by your geolocation, and information about listing your home for sale based on your geolocation. We may also approximate your location based off your IP address, to customize your experience on our Sites.

We may also use the information listed above to help diagnose problems and performance with the Services, analyze trends, customize your experience, and administer the Services. We may provide IP addresses to third-parties to help us analyze website user survey data. We may also use the information described in this section to better target information about Redfin's Sites and Services, for example, by displaying more accurate or relevant information on our Sites, matching you to a public record listing of a property, tailoring the advertising we display on third party websites and platforms, and sending better targeted and tailored messages, including via email and/or push notifications.

B. Registered Users of the Redfin Sites

We are required to collect certain information, including your name and email address, as a condition of our licenses with the multiple real estate listing services (the "MLSs") in order to allow you to access the full MLS listings. You give us this information when you create your Redfin account. When you give us this information at one of our events, or upon your request, we will create a Redfin account for you, and you agree that this Privacy Notice and our [Terms of Use](#) apply. In addition, when you are signed in to your Redfin account and using Redfin through Facebook, Twitter, or any other third-party authorization service, we may make use of the information that they provide us to further customize your Redfin experience. We may share Personal Information with such third parties to deliver Redfin tailored content both on our Services and on third party sites (e.g., social media sites).

- **My Redfin:** My Redfin is a feature that allows you to upload notes and photos about a property, save searches, add favorites and x-outs, and otherwise organize homes that may interest you. We save all of this "My Redfin" information for use later in connection with our Services. It is stored with your Redfin account information.
- **Account Password Security:** Your Redfin account password is encrypted on our server. It is your responsibility not to disclose your password to other people and to ensure you maintain its security.
- **Account Updates:** By visiting your [My Redfin: Account Settings](#), you can correct, amend, add or delete Personal Information associated with your account. However, even after you update

information, we may maintain a copy of the original information in our records as required by applicable law or other legal obligation.

C. Home Tours, Real Estate Classes, and other In-Person Meetings

When you submit a home tour request, we will ask for your tour date and time preferences, as well as your phone number. We may ask for similar information when you request or attend a home buying or selling class, or when you request or attend a strategy session or similar in-person meeting with a Redfin agent. We may also ask some questions so that our agent can verify your identity, and such information will be used to register you for a Redfin account. When you meet up with one of our agents, the agent may ask you to verify your identity and may even ask to see a photo ID.

D. Redfin Clients

When you are getting ready to buy or sell a home and you start working with our coordinators and agents, you become a Redfin client. As part of the home purchase or sale process, you will need to provide a lot of information as is customary for a home purchase or sale transaction. This information can include, without limitation, your name, address, phone number, email address, financial or payment information, including without limitation, buyer loan pre-approval documentation and seller property information. We ask you, as a buyer, for loan pre-approvals from a mortgage broker or lender to determine which homes are in your price range and to help you make an offer more quickly when you do find a home. You, as a seller, may be legally required to disclose certain information about your property to prospective buyers. Once you sign a listing agreement or buyer agreement with us, your relationship with Redfin is governed by that agreement, as well as our online [Terms of Use](#) and this Privacy Notice.

E. Redfin Mortgage

For users of Redfin Mortgage, the Redfin Mortgage [Consumer Privacy Notice](#) also applies to the processing of your Personal Information.

F. Communications with Redfin

Redfin may collect Personal Information from you such as email address, phone number, or mailing address when you request information about our Services, register for our newsletter, request customer or technical support, or otherwise communicate with us.

G. Marketing

We may send marketing materials to Redfin account holders and clients using various communication channels, including without limitation, email, text messages/SMS, push notifications, telephone calls, and direct mail. Individuals may also subscribe to Listing Alert Emails or other notifications with information such as customized summaries of homes for sale. Redfin may send you Redfin-related news and surveys in accordance with applicable law.

H. Call Recording

We may record any telephone calls between you and our agents or other representatives for training and quality assurance purposes.

I. Surveys

Redfin may contact you to participate in surveys. If you decide to participate, you may be asked to provide certain information, which may include Personal Information.

J. Sharing with Friends or Colleagues

Redfin's Services may allow you to forward or share certain content with a friend or colleague, such as an email inviting your friend to use our Services. Email addresses that you may provide for a friend or colleague will be used to send your friend or colleague the content or link you request in accordance with applicable law.

K. Interactive Features

Redfin may offer interactive features such as chat services, forums, and social media pages. We may collect the information you submit or make available through these features. Any content you provide on the public sections of these channels will be considered "public" and will not be subject to the privacy protections referenced herein.

L. De-Identified and Aggregated Information

We may use Personal Information and other information about you to create de-identified and/or aggregated information, such as de-identified demographic information, de-identified location information, de-identified or aggregated trends, reports, or statistics, information about the computer or device from which you access our Services, or other analyses we create. De-identified and aggregated information is used for a variety of functions, including the measurement of visitors' interest in and use of various portions or features of the Sites and Services. De-identified and aggregated information is not Personal Information, and we may use and disclose such information in a number of ways, including research, internal analysis, **analytics**, and any other legally permissible purpose.

M. Conferences and Trade Shows

We may attend or participate in conferences and trade shows where we collect Personal Information from individuals who interact with or express an interest in Redfin and/or the Services. If you provide us with any information at one of these events, we will use it for the purposes for which it was collected.

N. Information We Collect Automatically

We may collect certain information automatically when you use the Services. This information may include your Internet protocol (IP) address, user settings, IMEI, MAC address, cookie identifiers, mobile carrier, mobile advertising and other unique identifiers, details about your browser, operating system or device, location information, Internet service provider, pages that

you visit before, during and after using the Services, information about the links you click, and other information about how you use the Services. Information we collect may be associated with accounts and other devices.

O. Cookies and Pixel Tags/Web Beacons

We, as well as third parties that provide content, advertising, or other functionality on the Services, may use cookies, pixel tags, local storage, and other technologies ("Technologies") to automatically collect information through the Services. Technologies are essentially small data files placed on your computer, tablet, mobile phone, or other devices that allow us to record certain pieces of information whenever you visit or interact with our Sites and Services.

- **Cookies.** Cookies are small text files placed in visitors' device browsers to store their preferences. Most browsers allow you to block and delete cookies. However, if you do that, the Services may not work properly.
- **Pixel Tags/Web Beacons.** A pixel tag (also known as a web beacon) is a piece of code embedded on the Sites that collects information about users' engagement on that web page. The use of a pixel allows us to record, for example, that a user has visited a particular web page or clicked on a particular advertisement.

You may stop or restrict the placement of Technologies on your device or remove them by adjusting your preferences as your browser or device permits.

P. Information from Other Sources

We may obtain information about you from other sources, including through third-party services and organizations to supplement information provided by you. This supplemental information allows us to verify information that you have provided to us and to enhance our ability to provide you with the Services.

Q. Other Uses of Information

In addition to the specific collection and uses listed above, we may use any of the Personal Information we collect for the following business purposes:

- to operate our Sites and provide our Services in accordance with our [Terms of Use](#) and/or any other agreement you may have with us;
- to manage your Personal Information and accounts;
- to respond to your questions or inquiries;
- to conduct promotional activities, including contests or surveys;
- to undertake internal research for technological development and demonstration;
- to improve, upgrade or enhance our Sites and Services;
- to send you informational or promotional communications;
- to detect bugs, security incidents (including to protect against malicious, deceptive, fraudulent, or illegal activity, and prosecute those responsible for that activity);
- to identify and repair errors that impair existing intended functionality;

- to undertake activities to verify or maintain the quality or safety of a Service, Site or transaction;
- to carry out other purposes that are disclosed to you and/or to which you consent; and
- to pursue our legitimate interests where your rights and freedoms do not outweigh these interests.

2. Personal Information Sharing

While we do not exchange your Personal Information with others for monetary or other valuable consideration, we may share your Personal Information with the following categories of third parties as part of our Services to you or to assist us in conducting our marketing and advertising, or for other business or commercial purposes listed above in this Privacy Notice.

A. Public Record Information

Please be aware that home sales and purchases may be a matter of public record, and your name and address, the price you paid, your property taxes, and other information may be available from public sites regardless of the brokerage(s), if any, who assist in the transaction. We post on our Sites some information that typically becomes part of the public record of a home sale or purchase.

B. Non-Public Record Information

We share information obtained from you, MLSs and other third-party sources that is not on the public record to facilitate your home purchase or sale transaction. This includes:

- **Service Providers to all Redfin Clients:** Our agents work with third parties to process your home search and sale transaction and must share your information with those third parties. Examples include MLSs and providers of software used for document preparation and electronic signing.
- **Partner Agents:** A Partner Agent is employed by or works with another brokerage and is not a representative or employee of Redfin. Partner Agents have contracted with us to provide Redfin-quality service to a wider range of customers. We'll refer you to a Partner Agent in our discretion. If you are referred to a Partner Agent for your home purchase or sale transaction, we share your information with that Partner Agent so they can assist you. Redfin is not responsible for the work performed or the services provided by Partner Agents in any manner.
- **Home Seller Service Providers:** As is customary as your home sales agent, we share your listing information with MLSs and other listing websites, such as Realtor.com, Trulia.com and Zillow.com. As a result, your listing may appear on more than one website. We may also share your listing and contact information with listing vendors such as photographers, home staging experts and home repair professionals like plumbers and electricians, as needed.

- **Home Buyer Service Providers:** As is customary as your home purchase agent, we must share your buying information with inspectors, title companies, escrow agents, closing attorneys, lenders, and other third parties as needed to process your transaction.
- **Potential Buyers:** By law, we are required to disclose certain information about your property to potential buyers.

C. Negotiations

We also post price offers and counteroffers on our Sites. We do not post your name on our Sites without your permission, but if the sale is closed, the price and the fact that you bought or sold your house at that price may be a matter of public record.

D. Redfin Corporate Family

We may share your information with members of the Redfin family of entities for various purposes, including to: (i) provide the Services to you; (ii) help detect and prevent potentially illegal and fraudulent acts and other violations of our policies and agreements; (iii) help with marketing initiatives; and (iii) manage and improve Redfin products, Sites, Services and tools.

E. Redfin Requests

Through the Services, you can make a request to tour a home, get in contact with a real estate agent, receive help selling or buying a home, or submit other requests. When you make such a request through Redfin, you authorize Redfin to share your Personal Information including your contact information, home search history, favorites and saved searches, with a real estate professional (a Redfin Agent or staff member, or a Partner Agent) for the purpose of responding to your request.

F. Service Providers

We may share your Personal Information with third-party service providers that assist us in providing the Services. We use reasonable efforts do so with the appropriate contractual protection in place to ensure that your Personal Information is protected and used only in accordance with this Privacy Notice.

G. Business Partners

We may provide Personal Information to business partners to provide you with a product or service you have requested. We may also provide Personal Information to business partners with whom we jointly offer products or services in accordance with applicable law.

H. Third-Party Cookies and Information Used to Target Ads to You

We may share the information that we collect about you with others (including advertising networks and service providers) to tailor and serve you ads on our Services, as well as other websites and social media networks. This practice is commonly referred to as "interest-based advertising" or "online behavioral advertising." These advertising networks track your online

activities over time by collecting information through automated means, including through the use of Technologies (e.g., cookies, web-beacons and other methods). This allows Redfin to target our advertising to you through demographic, behavioral and contextual means. As a result, you may see ads for Redfin on other websites and social media.

I. APIs and SDKs

We may use third party APIs and software development kits ("SDKs") as part of the functionality of our Services. APIs and SDKs may allow third parties, including advertising partners, to collect your Personal Information to provide our Service related content that is more relevant to you. For more information about our use of APIs and SDKs, please contact us as set forth below.

J. Information Disclosed in Connection with Business Transactions

If we are involved in a merger, acquisition, financing due diligence, reorganization, bankruptcy, receivership, purchase or sale of assets, or transition of service to another provider, then your information may be sold or transferred as part of such a transaction as permitted by law and/or contract.

K. Information Disclosed for Our Protection and the Protection of Others

We cooperate with government and law enforcement officials or private parties to enforce and comply with the law. We may disclose any information about you to government or law enforcement officials or private parties as we, in our sole discretion, believe necessary or appropriate: (i) to respond to claims or legal processes (including subpoenas); (ii) to protect our property, rights and safety and the property, rights and safety of a third party or the public in general; and (iii) to stop any activity that we consider illegal, unethical or legally actionable.

L. Other Purposes

Redfin may share your Personal Information for other purposes that are clearly disclosed to you at the time you provide Personal Information or with your consent.

3. Your Choices

A. General

You may have the right to opt in, object to or opt out of certain uses of your Personal Information. Where you have consented to the processing of your Personal Information, you may withdraw that consent at any time by contacting us as described below. Even if you opt out, we may still collect and use Personal Information regarding your activities on our Sites, Services and/or information from the advertisements on third party websites for other legal purposes as described above in accordance with applicable law.

B. Electronic Messages, Phone Calls and other Communications

If you receive an unwanted email from Redfin, you can visit the Email Preferences section of your [My Redfin: Alerts & Emails](#) or use the unsubscribe link found at the bottom of the email to opt out of receiving future emails. Note that you will continue to receive transaction-related emails regarding products or Services you have requested. We may also send you certain non-promotional communications regarding us and our Services, and you will not be able to opt out of those communications (e.g., communications regarding the Services or updates to our Terms of Use or this Privacy Notice).

C. Opting-Out of Technologies and Tracking

- **Redfin Cookies:** We put Redfin cookies on your device's browser to help us keep track of when you were last on the Sites, and what you last searched on the Sites. While you are free to disable cookies on your browser, we recommend that you leave cookies activated to use some of the most useful Redfin features.
- **Third-Party Cookies for Analytics:** We may use third parties, such as comScore and Google, to help us analyze how people are using the Services, and those third parties are authorized to use Technologies to access Personal Information regarding visitors to the Sites.
- **Google Analytics:** We use the Google Analytics service to provide us with demographic data about our users on a de-identified basis. This Google service uses a cookie that can be recognized by Google or its affiliate DoubleClick when you visit other websites. For more information about Google Analytics, please visit www.google.com/policies/privacy/partners/. You can opt out of Google Analytics' collection and use of data generated by your use of the Services by going to <http://tools.google.com/dlpage/gaoptout>.
- **Opting Out of Redfin's Interest-Based Advertising:** If you do not want Redfin to collect, use and share information about you to deliver interest-based advertising, please [click here](#) and follow the opt-out instructions. Please note that most opt-out mechanisms are cookie-based and will only affect the specific computer and browser that is used to submit an opt-out request. If you have multiple computers or change computers, or use multiple browsers, you will need to submit opt-out requests for each such computer or browser. In addition, if you delete, block or otherwise restrict cookies, you will need to renew the opt-out choices to ensure that any opt-out cookies remain effective.
- **Opting Out of Interest-Based Advertising Generally:** The online advertising industry also provides websites from which you may opt out of receiving targeted ads from data partners and other advertising partners that participate in self-regulatory programs. You can access these, and also learn more about targeted advertising and consumer choice and privacy, at www.networkadvertising.org/managing/opt_out.asp, <http://www.youronlinechoices.eu/>, <https://youradchoices.ca/choices/>, and www.aboutads.info/choices/. To separately make choices for mobile apps on a mobile device, you can download DAA's AppChoices application from your device's app store. Please note you must separately opt out in each browser and on each device.

- **Opting Out of Mobile Device ID Tracking:** Mobile device users may opt-out of receiving some interest-based advertising in their mobile apps by following the instructions for [Android](#) and [iOS](#). Please note that precise instructions may vary by device.
- **Do Not Track:** Do Not Track ("DNT") is a privacy preference that users can set in certain web browsers. Please note that we do not respond to or honor DNT signals or similar mechanisms transmitted by web browsers.
- **Flash Cookies:** Redfin does not currently use flash cookies, but we may in the future. To control flash cookies, [click here](#). Please note that flash cookies do not reside in your browser, so your browser settings will not affect them.

D. Mobile Devices

We may send you push notifications through the Redfin mobile application. You may at any time opt-out from receiving these types of communications by changing the settings on your mobile device. Redfin may also collect location-based information if you use our mobile applications. You may opt-in or opt-out of this collection by changing the settings on your mobile device.

E. Delete your Account

You may delete your Redfin account on your [My Redfin: Account Settings](#) page under "Close Account" section. We retain Personal Information for as long as we have a valid business purpose to or to meet our legal obligations. Redfin may be required to keep a copy of your Personal Information in accordance with Section 5 below.

4. Individual Rights in Personal Information

In accordance with applicable law, you may have the right to: (i) request confirmation of whether we are processing your Personal Information; (ii) obtain access to or a copy of your Personal Information; (iii) receive an electronic copy of Personal Information that you have provided to us, or ask us to send that information to another company (the "right of data portability"); (iv) restrict our uses of your Personal Information; (v) seek correction or amendment of inaccurate, untrue, incomplete, or improperly processed Personal Information; and (vi) request erasure of Personal Information held about you by Redfin, subject to certain exceptions prescribed by law. If you would like to exercise any of these rights, please contact us as set forth below.

We will process such requests in accordance with applicable laws. To protect your privacy, Redfin may take steps to verify your identity before fulfilling your request.

We collect and report annual metrics on how we respond to requests: [Redfin Privacy Metrics 2020](#)

5. Personal Information Retention

Redfin retains the information we receive as described in this Privacy Notice for as long as you use our Services or as necessary to fulfill the purpose(s) for which it was collected, provide our Services, resolve disputes, establish legal defenses, conduct audits, pursue legitimate business purposes, enforce our agreements, and comply with applicable laws.

6. Personal Information Storage and Security

Redfin is headquartered in the United States. You agree that we may store and process the information we collect anywhere in the world, including but not limited to, the United States, the European Union, or other countries.

We take steps to ensure that your information is treated securely and in accordance with this Privacy Notice. Unfortunately, the Internet cannot be guaranteed to be 100% secure, and we cannot ensure or warrant the security of any information you provide to us. To the fullest extent permitted by applicable law, we do not accept liability for unintentional disclosure.

By using the Services or providing Personal Information to us, you agree that we may communicate with you electronically regarding security, privacy, and administrative issues relating to your use of the Services. If we learn of a security system's breach, we may attempt to notify you electronically by posting a notice on the Services, by mail or by sending an e-mail to you.

7. Other Important Information

A. California Privacy Notice Provisions

The follow provisions supplement the information contained in our privacy Notice above and applies solely to individuals, who reside in the State of California ("consumer" or "you") in our role as a business. We adopt this notice to comply with the California Consumer Privacy Act of 2018, as amended ("CCPA") and any terms defined in the CCPA have the same meaning when used in this notice.

Information We Collect

In providing our Services, we may collect information that identifies, relates to, describes, is reasonably capable of being associated with, or could reasonably be linked, directly or indirectly, with a particular consumer or household ("Personal Information").

Personal Information does not include:

- Publicly available information from government records.
- Deidentified or aggregated consumer information.
- Information excluded from the CCPA's scope, like:

- health or medical information covered by the Health Insurance Portability and Accountability Act of 1996 (HIPAA) and the California Confidentiality of Medical Information Act (CMIA) or clinical trial data;
- personal information covered by certain sector-specific privacy laws, including the Fair Credit Reporting Act (FRCA), the Gramm-Leach-Bliley Act (GLBA) or California Financial Information Privacy Act (FIPA), and the Driver's Privacy Protection Act of 1994.

We have collected the following categories of Personal Information from our consumers in our role as a business within the last twelve (12) months (as indicated with a Yes below):

Category	Examples	Collected
Identifiers.	Name, alias, postal address, unique personal identifier, online identifier, Internet Protocol address, email address, account name, Social Security, or other similar identifiers.	Yes
Protected classification characteristics under California or federal law.	Age (40 years or older), race, color, ancestry, national origin, citizenship, religion or creed, marital status, medical condition, physical or mental disability, sex (including gender, gender identity, gender expression, pregnancy or childbirth and related medical conditions), sexual orientation, veteran or military status, genetic information (including familial genetic information).	No
Commercial information.	Records of personal property, products or services purchased, obtained, or considered, or other purchasing or consuming histories or tendencies.	Yes
Biometric information.	Physiological, biological, or behavioral, characteristics (including DNA) that can be used to establish individual identity, or imagery of the iris, retina, fingerprint, face, hand, palm, vein patterns, and voice recordings, from which an identifier template such as a faceprint, a minutiae template, or a voiceprint, can be extracted and keystroke patterns or rhythms, gait patterns, or rhythms, and sleep, health or exercise data that contain identifying information.	No

Category	Examples	Collected
Internet or other electronic network activity.	Browsing history, search history, information on a consumer's interaction with an internet website, application, or advertisement.	Yes
Geolocation data.	Physical location or movements.	Yes
Sensory data.	Audio, electronic, visual, thermal, olfactory, or similar information.	No
Professional or employment-related information.	Current or past job history or performance evaluations.	No
Non-public education information (per the Family Educational Rights and Privacy Act (20 U.S.C. Sec. 1232g, 34 C.F.R. Part 99)).	Education records directly related to a student maintained by an educational institution or party acting on its behalf, such as grades, transcripts, class lists, student schedules, student identification codes, student financial information, or student disciplinary records.	No
Inferences drawn from other personal information to create a profile about a consumer.	Profile reflecting a consumer's preferences, characteristics, psychological trends, predispositions, behavior, attitudes, intelligence, abilities, and aptitudes.	No

Category	Examples	Collected
Personal information categories listed in the categories above, but references in the California Customer Records statute (Cal. Civ. Code § 1798.80(e)).	A name, signature, Social Security number, physical characteristics or description, address, telephone number, passport number, driver's license or state identification card number, insurance policy number, education, employment, employment history, bank account number, credit card number, debit card number, or any other financial information, medical information, or health insurance information. Personal Information does not include publicly available information that is lawfully made available to the general public from federal, state, or local government records. Note: Some personal information included in this category may overlap with other categories.	No

Categories of Sources from Which Personal Information is Collected

We obtain the categories of Personal Information listed above from the types and categories of sources described above in this Privacy Notice.

Business or Commercial Purposes for Collecting Personal Information

We may use, or disclose the Personal Information we collect for the business purposes describe above in this Privacy Notice. We will not collect additional categories of Personal Information or use the Personal Information we collected for materially different, unrelated, or incompatible purposes without providing you additional notice.

Disclosures of Personal Information for a Business Purpose

We may disclose your Personal Information to the third parties or others as described above in this Privacy Notice, for any of the business purposes described above in this Privacy Notice. When we disclose Personal Information for a business purpose, we enter a contract that describes the purpose and requires the recipient to both keep that Personal Information confidential and not use it for any purpose except performing the contract.

In the preceding twelve (12) months, we have disclosed the following categories of Personal Information in our role as a business for a business purpose:

- Identifiers
- Commercial information
- Internet information

Sales of Personal Information

In the preceding twelve (12) months, we have not sold any Personal Information in our role as a business as defined in the CCPA or other applicable laws.

Your Rights and Choices

The CCPA provides consumers (California residents) with specific rights regarding their Personal Information. This section describes your CCPA rights and explains how to exercise those rights.

Right to Know

You have the right to request that we disclose certain information to you about our collection and use of your Personal Information over the past 12 months. Once we receive and confirm your request, we will disclose to you:

- The specific pieces of Personal Information we collected about you
- The categories of Personal Information we collected about you.
- The categories of sources from which the Personal Information is collected about you.
- Our business or commercial purpose for collecting or selling that Personal Information.
- The categories of third parties with whom we share that Personal Information.
- If we sold or disclosed your Personal Information for a business purpose

Right to Delete

You have the right to request that we delete any of your Personal Information that we collected from you and retained, subject to certain exceptions. Once we receive and confirm your request, we will delete (and direct our service providers to delete) your Personal Information from our records, unless an exception applies.

We may not be able to honor your deletion request if retaining the information is necessary for us or our service provider(s) to:

- Complete the transaction for which we collected the Personal Information, provide a good or service that you requested, take actions reasonably anticipated within the context of our ongoing business relationship with you, or otherwise perform our contract with you.
- Detect security incidents, protect against malicious, deceptive, fraudulent, or illegal activity, or prosecute those responsible for such activities.
- Debug products to identify and repair errors that impair existing intended functionality.
- Exercise free speech, ensure the rights of other consumers to exercise their free speech rights, or exercise another right provided for by law.

- Comply with the California Electronic Communications Privacy Act (Cal. Penal Code § 1546 et. seq.).
- Engage in public or peer-reviewed scientific, historical, or statistical research in the public interest that adheres to all other applicable ethics and privacy laws, when the business' deletion may likely render impossible or seriously impair the research's achievement, if you previously provided informed consent.
- Enable solely internal uses that are reasonably aligned with consumer expectations based on your relationship with us.
- Comply with a legal obligation.
- Make other internal and lawful uses of that information that are compatible with the context in which you provided it.

Exercising Your Right to Know and Right to Delete

To exercise the access and deletion rights described above, please submit your request to us at privacy@redfin.com, or contact us in writing at the address listed below in this Privacy Notice. Only you, or an authorized agent registered with the California Secretary of State that you authorize to act on your behalf, may make a consumer request related to your Personal Information. You may also make a consumer request on behalf of your minor child (12 and under). If you have any questions about your access or deletion rights described above, you may also contact us via email or regular mail at the contact information contained below in this Privacy Notice.

You may only make a Right to Know request twice within a 12-month period.

We cannot respond to your request to delete or provide you with Personal Information if we cannot verify your identity or your authority to make the request and confirm the Personal Information relates to you.

We will only use Personal Information provided in a verifiable consumer request to verify the requestor's identity or authority to make the request.

Response Timing and Format

Where possible, we will respond to a verified consumer request within forty-five (45) days of its receipt; however, if we require more time, we will inform you of the reason and extension period.

Any disclosures we provide will only cover the 12-month period preceding the verified consumer request's receipt. The response we provide will also explain the reasons we cannot comply with a request, if applicable. For data portability requests, we will select a format to provide your Personal Information that is readily useable and should allow you to transmit the information from one entity to another entity without hindrance.

We do not charge a fee to process or respond to your verifiable consumer request unless it is excessive, repetitive, or manifestly unfounded. If we determine that the request warrants a fee, we will tell you why we made that decision and provide you with a cost estimate before completing your request.

Personal Information Sales Opt-Out and Opt-In Rights

We do not disclose your Personal Information to any third-party in a manner that would be considered a sale under the CCPA.

Non-Discrimination

We will not discriminate against you for exercising any of your CCPA rights. Unless permitted by the CCPA, we will not:

- Deny you goods or services.
- Charge you different prices or rates for goods or services, including through granting discounts or other benefits, or imposing penalties.
- Provide you a different level or quality of goods or services.
- Suggest that you may receive a different price or rate for goods or services or a different level or quality of goods or services.

However, we may offer you certain financial incentives permitted by the CCPA that can result in different prices, rates, or quality levels. Any CCPA-permitted financial incentive we offer, will reasonably relate to your Personal Information's value to us and contain written terms that describe the program's material aspects. Participation in a financial incentive program requires your prior opt-in consent, which you may revoke at any time.

California's "Shine the Light" law (Civil Code Section § 1798.83) permits users of our Sites and Services who are California residents to request certain information regarding our disclosure of Personal Information to third parties for their direct marketing purposes. To make such a request, please contact us using the contact information provided below in this Privacy Notice.

B. Children

Our Sites and Services are not directed to children under 13 (or other age as defined by local law), and we do not knowingly collect Personal Information from children. If you learn that your child has provided us with Personal Information without your consent, you may contact us at the email address below with the subject line "COPPA Child Information Request." If we learn that we have collected any Personal Information from a child in violation of applicable law, we will promptly take steps to delete such information.

C. Supervisory Authority

If you are located in the European Economic Area, you have the right to lodge a complaint with a supervisory authority if you believe our processing of your Personal Information violates applicable law.

D. Links to Third Party Sites/Applications

The Services may contain links to other websites/applications and other websites/applications may reference or link to our Sites or other Services. These other websites and applications are not controlled by us. We encourage our users to read the privacy policies of each website and application with which they interact. Redfin does not endorse, screen or approve, and are not responsible for the privacy practices or content of such other websites or applications. Visiting these other websites or applications is at your own risk.

E. Changes to this Privacy Notice

Redfin may revise this Privacy Notice from time to time in our sole discretion. If there are any material changes to this Privacy Notice, we will notify you as required by applicable law, which may include updating our notice on our Sites. You understand that you will be deemed to have accepted the updated Privacy Notice if you continue to use the Services after the new Privacy Notice takes effect.

E. Contact Us

If you have any questions about our privacy practices or this Privacy Notice, please contact us at:

Attn:
Legal Dept
Redfin Corporation
1099 Stewart Street, Suite 600
Seattle, WA 98101

privacy@redfin.com

 California DRE #01521930

TREC: [Info About Brokerage Services](#), [Consumer Protection Notice](#)

If you are using a screen reader, or having trouble reading this website, please call Redfin Customer Support for help at [1-844-759-7732](tel:1-844-759-7732).

EXHIBIT 53

**2/8/2022
CHRISTOPHER
CASTILL
DEPOSITION
TRANSCRIPT
EXCERPTS**

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA

CHASOM BROWN, WILLIAM BYATT,
JEREMY DAVIS, CHRISTOPHER
CASTILLO, and MONIQUE
TRUJILLO, individually and on
behalf of all other similarly
situated,

Plaintiffs,

vs.

Case No.

GOOGLE LLC,

5:20-cv-03664-LHK-SVK

Defendant.

_____/

VIDEOTAPED DEPOSITION OF CHRISTOPHER CASTILLO

Remote Zoom Proceedings

Sacramento, California

Tuesday, February 8, 2022

REPORTED BY:

LESLIE ROCKWOOD ROSAS, RPR, CSR 3462

JOB No. 5077508

Pages 1 - 266

Page 1

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA

CHASOM BROWN, WILLIAM BYATT,
JEREMY DAVIS, CHRISTOPHER
CASTILLO, and MONIQUE
TRUJILLO, individually and on
behalf of all other similarly
situated,

Plaintiffs,

vs.

Case No.

GOOGLE LLC,

5:20-cv-03664-LHK-SVK

Defendant.

_____/

Videotaped deposition of CHRISTOPHER CASTILLO,
taken on behalf of the Defendant, Remote Zoom Proceedings
from Sacramento, California, beginning at 9:06 a.m.
Pacific Standard Time and ending at 5:53 p.m. Pacific
Standard Time, on Tuesday, February 8, 2022, before
Leslie Rockwood Rosas, RPR, Certified Shorthand Reporter
No. 3462.

1 APPEARANCES :

2
3 FOR THE PLAINTIFFS :

4 MORGAN & MORGAN

5 BY: RYAN MCGEE, ESQ.

6 201 North Franklin Street, 7th Floor

7 Tampa, Florida 33602

8 (813) 223-5505

9 rmcgee@forthepeople.com

10 -and-

11 BOIES SCHILLER FLEXNER LLP

12 BY: JAMES LEE, ESQ.

13 100 SE Second Street, Suite 2800

14 Miami, Florida 33131

15 (305) 539-8400

16 jlee@bsfllp.com

17 -and-

18 BY: HSIAO (MARK) C. MAO, ESQ.

19 ERIKA NYBORG-BURCH, ESQ.

20 44 Montgomery Street, 41st Floor

21 San Francisco, California 91401

22 (415) 293-6800

23 mmao@bsfllp.com

24 enyborg-burch@bsfllp.com

25

1 APPEARANCES (Continued):

2
3 FOR THE DEFENDANT:

4 QUINN EMANUEL URQUHART & SULLIVAN, LLP

5 BY: STEPHEN A. BROOME, ESQ.

6 865 South Figueroa Street, 10th Floor

7 Los Angeles, California 90017

8 (213) 443-3285

9 stephenbroome@quinnemanuel.com

10 -and-

11 BY: TRACY XI GAO, ESQ.

12 555 Twin Dolphin Drive, 5th Floor

13 Redwood Shores, California 94065

14 (650) 801-5000

15 tracygao@quinnemanuel.com

16 -and-

17 BY: JOMAIRE A. CRAWFORD, ESQ.

18 51 Madison Avenue, 22nd Floor

19 New York, New York 10010

20 (212) 849-7581

21 jomairecrawford@quinnemanuel.com

22
23 Also Present:

24 Scott Slater, Videographer

25

I N D E X

TUESDAY, FEBRUARY 8, 2022

WITNESS

EXAMINATION

CHRISTOPHER CASTILLO

BY MR. BROOME

10, 247

BY MR. MCGEE

237

QUESTIONS WITNESS INSTRUCTED NOT TO ANSWER:

(NONE)

1 A. That doesn't seem right. Because it doesn't say
2 make any reference to key terms.

3 Q. Momentito. Momentito.

4 A. Yeah. It seems just to my initial observation,
5 it seems this document's incomplete. 10:39:53

6 Q. Okay. Put aside -- putting that aside, the key
7 terms, do you see any reference in here to Incognito or
8 private browsing?

9 MR. MCGEE: I would again renew my objection
10 about the hyperlinks that are represented in the document 10:40:35
11 that seem incomplete. So object to the form and --

12 MR. BROOME: You have a standing objection on
13 that, I think.

14 MR. MCGEE: Okay.

15 THE WITNESS: I've reviewed the document. I 10:40:50
16 can't find anything that says Incognito in here. Did I
17 miss it? I don't -- I don't see it.

18 Q. BY MR. BROOME: Is there a -- my question's a
19 little broader.

20 Do you see anything referencing Incognito, 10:41:04
21 private browsing, or any other sort of similar concept --

22 A. Okay.

23 Q. -- in this document?

24 A. There's a section on information security. "We
25 offer two-step verification when you access your Google 10:41:32

1 Account and a Safe Browsing feature in Google Chrome."

2 That's hyperlinked and there's no -- there's no
3 explanation of what that's about. So that could be in
4 there. I don't -- but I don't see it.

5 Q. You're just speculating; right? 10:41:49

6 A. I'm speculating, but more importantly -- yeah.

7 Q. Okay. More importantly what?

8 A. I don't see it.

9 Q. You don't see any reference to Incognito or
10 private browsing in this document; right? 10:42:18

11 A. No.

12 Q. Okay. Do you see it on page 2? Well, actually,
13 let me go off of it.

14 MR. BROOME: Sorry, Ryan. You said at 11:00 you
15 need to break, or when do you need to break? 10:42:43

16 MR. MCGEE: Yeah, at 10:55. So about
17 12 minutes.

18 MR. BROOME: That should be fine.

19 Q. Let me go up to page 1, Mr. Castillo.

20 A. Okay. 10:42:55

21 Q. "Information We Collect." Do you see that
22 heading?

23 A. Okay, I see it.

24 Q. All right. It says: "We collect information to
25 provide better services to all of our users, from 10:43:04

1 figuring out basic stuff, like which language you speak,
2 more complex things, like which ads you'll find more" --
3 "most useful, or the people who matter most to you
4 online."

5 Do you see that? 10:43:15

6 A. Yes, I see that.

7 Q. And below that, it says: "We collect
8 information in two ways."

9 Do you see that?

10 A. Okay. 10:43:20

11 Q. All right. And then if you go to the second
12 bullet, it says -- and now we're on page 2. It says:
13 "Information We Get From Your Use of Our Services."

14 Do you see that?

15 A. Yes, I see that paragraph. 10:43:37

16 Q. All right. It says: "We may collect
17 information about the services that you use and how you
18 use them, like when you visit a website that uses our
19 advertising services or you view and interact with our
20 ads and content." 10:43:49

21 Do you see that?

22 A. I see it.

23 Q. And is it clear to you -- is that statement
24 clear to you that when you visit a website that uses

25 our -- the Google's advertising services or you view or 10:43:59

Page 68

1 interact with Google's ads and content, that Google may
2 receive information?

3 MR. MCGEE: Object to the form.

4 You can answer.

5 THE WITNESS: So when I -- when I see this -- 10:44:12
6 when I read this paragraph, I see that Google may collect
7 information when -- you know, Google may collect
8 information on the websites I'm visiting. Yes, I see
9 that.

10 Q. BY MR. BROOME: Okay. And that's clear to you; 10:44:28
11 right?

12 A. That's clear.

13 Q. Okay. And then the next bullet says: "Device
14 Information." It says: "We may" -- and it's sort of
15 indented. Well, actually, let me back up. 10:44:39

16 At the sentence we just read says: "We may
17 collect information about the services that you use and
18 how you use them, like when you visit a website that uses
19 our advertising services or you view and interact with
20 our ads and content." 10:44:55

21 Right? Did I read that correctly?

22 A. Are you asking me if you read that correctly?
23 Yes, you read that correctly.

24 Q. And then it says: "This information includes,"
25 colon. Do you see that? 10:45:06

1 A. Yes, I see it.

2 Q. And then the next bullet says: "Device
3 Information." It says: "We may collect device specific
4 information such as your hardware model, operating system
5 version, unique device identifiers, and mobile network 10:45:19
6 information, including phone number. Google may
7 associate your device identifiers or phone number with
8 your Google Account."

9 Do you see that?

10 A. I see it. 10:45:33

11 Q. Okay. And is that clear to you?

12 A. It's clear to me that when I'm searching Google
13 in regular mode, and not Incognito mode, that you collect
14 this data.

15 Q. Okay. And then there's log information and 10:45:46
16 location information, unique application numbers, local
17 storage, cookies, and anonymous identifiers.

18 Do you see all those headings?

19 A. Yes. I see the log information and all the
20 details you have in that paragraph. 10:46:07

21 Q. Okay. And it's clear to you that Google may
22 receive that information when you visit a website that
23 uses Google's advertising services; correct?

24 A. That's a very broad question --

25 MR. MCGEE: Objection. 10:46:20

1 THE WITNESS: -- because it does not specific
2 apply to all the times that I'm using Google.

3 Q. BY MR. BROOME: Well, it says when -- the
4 limiter is in the -- the bullet, information we get from
5 your use of our services. 10:46:33

6 Do you see that?

7 A. So does this paragraph mean that when I'm in
8 Incognito mode and I'm specifically not consenting -- not
9 consenting in a third-party state like California -- that
10 you're collecting that data? Is that what you are 10:46:48
11 representing that Google does by that question?

12 Q. I'm -- you're going pretty far afield there,
13 Mr. Castillo. Respectfully, I'd just like ask you to
14 focus on the question.

15 A. Okay. Fair enough. 10:47:04

16 Q. I understand you have your allegations and you
17 have your theory about the case, and the lawyers will --
18 you know, you've got a very capable lawyer.

19 A. Fair enough.

20 Q. We'll all argue about that. 10:47:12

21 A. That was a broad question, to be -- to be fair.
22 It was a very broad question.

23 Q. I'm just asking you about the document in front
24 of you. It says: "We may collect information about the
25 services that you use and how you use them, like when you 10:47:24

1 visit a website that uses our advertising services or you
2 view and interact with our ad or contents." And you said
3 that's clear to you.

4 MR. MCGEE: Object to the form.

5 Q. BY MR. BROOME: Are you following me so far? 10:47:36
6 I'm just trying to break it down in bite size --

7 A. Okay. So ask your question again because that
8 was more like a statement.

9 Q. I'm just trying to orient you.

10 A. All right. I got it. 10:47:46

11 Q. Then it says: "This information includes," and
12 it lists, you know, six categories of information.

13 Do you see that?

14 A. I see five. I don't see six.

15 Q. You don't see six. Device information? 10:48:03

16 A. Wait. I'm still on log information. Details of
17 how you use our services, such as search queries,
18 telephone log, internet protocol addresses, device event
19 information, cookies. That's five items. You said six.

20 Q. Yeah. I'm looking at the bolded headings; 10:48:21
21 right? Do you see it says: "This information includes,"
22 and then it has --

23 A. Oh, I see. You're looking at a multi pages at
24 the same time. I'm sorry. I'm limited here. I can only
25 go one page at a time. 10:48:33

1 So let's see, one, two, three, four, five, six.

2 Now I understand what you mean by six. You're not just
3 talking about log information. You're talking about in
4 addition to the things they collect. Log information,
5 device information, location information, unique
6 application numbers, local storage, cookies, and
7 anonymous identifiers, all things you're saying Google
8 collects. Okay, I see it.

10:48:50

9 Q. Yeah. Is that clear to you, that Google
10 collects that information when you visit a web -- well,
11 strike that. Let me -- let me start again.

10:49:02

12 Based on this document, as you're reading this
13 document, is it clear to you that Google receives that
14 information, those categories that you just listed, when
15 you visit a website that uses Google's advertising
16 services or you view or you're at Google's ads and
17 content?

10:49:15

18 MR. MCGEE: Object to the form.

19 THE WITNESS: This document states that Google
20 collects these information. This document from --
21 from -- from -- from 2012 states that Google collects all
22 these items when I go to a website. Yes.

10:49:31

23 Q. BY MR. BROOME: Okay.

24 A. That's clear to me.

25 Q. And there's nothing in this document, at least,

10:49:44

1 that suggests that Google doesn't collect that data when
2 you're in private browsing mode; correct?

3 MR. MCGEE: Object to the form, subject to my
4 prior standing objection about hyperlinks and the
5 incompleteness of the document. 10:50:01

6 MR. BROOME: Fair.

7 THE WITNESS: So can you -- can you state that
8 as a question? I think you're trying to tell me what I
9 think. Ask me a question.

10 Q. BY MR. BROOME: Can you see anything in this 10:50:12
11 document, can you point me to anything in this document
12 that suggests that the information Google receives when
13 you visit a website that uses Google's advertising
14 services will not be received by Google if you use
15 private browsing or Incognito mode? 10:50:26

16 MR. MCGEE: Same objection.

17 THE WITNESS: Yeah, I don't see anything from
18 this 2012 document that says that what's in front of me
19 here, that -- that Google won't collect data.

20 Q. BY MR. BROOME: Now we're making progress. 10:50:41

21 A. It's saying that Google will collect data.

22 MR. BROOME: Okay, great.

23 All right. Now is probably a good time to
24 break. I was about to turn to another document, Ryan, so
25 if you want to take our break now. 10:50:58

1 MR. MCGEE: Yeah. Yeah, that will be great.

2 And I'll try to get moved up on the doc -- we can go off
3 the record.

4 THE VIDEOGRAPHER: We are off the record. The

5 time is 10:51 a.m. 10:51:07

6 (Recess.)

7 (Exhibit 4, Google Chrome Privacy Notice, last
8 modified 10/18/12, was marked for identification
9 by counsel electronically.)

10 THE VIDEOGRAPHER: We are back on the record. 12:01:12

11 The time is 12:01 p.m.

12 Q. BY MR. BROOME: Welcome back, Mr. Castillo. If
13 you could go back to Exhibit 2.

14 A. Okay. You want me to refresh and go back to

15 Exhibit 2? 12:01:33

16 Q. Yes, please.

17 A. Okay. And can you refresh -- what is this
18 exhibit?

19 Q. At the top it says "Google Terms of Service."

20 Do you remember I asked you some questions about this 12:01:49

21 one?

22 A. Yeah, this is from back in March 1st, 2012,
23 before the class period; is that correct?

24 Q. Yes. And remember I asked you some questions

25 about this, and I said did you read it, and I think you 12:01:58

Page 75

1 websites?

2 A. Yes, I did -- I understand that, and I
3 understand that as an --

4 MR. MCGEE: Mr. Castillo, I just want to lodge
5 an objection to the use of the term "basic mode." So 12:36:30
6 object to the form. It's been previously --

7 MR. BROOME: Objection, Ryan. You literally
8 just interrupted the witness in the middle of an answer,
9 and now you're -- now you're putting words in his mouth.
10 Come on. 12:36:45

11 MR. MCGEE: What words have I put in his mouth,
12 Steve? I'm trying to lodge an objection. I held my
13 hands up on the screen to try to indicate to Mr. Castillo
14 that I'm trying to lodge an objection, and I am just
15 simply making -- I am lodging an objection to the use of 12:36:58
16 the term "basic mode."

17 I didn't tell him what to say, didn't say what
18 it says in the discovery, or anything else.

19 So I take -- take umbrage to your
20 characterization there. 12:37:12

21 Q. BY MR. BROOME: Okay. Let me ask the question
22 again.

23 A. Okay.

24 Q. Mr. McGee will have another objection, I'm sure.

25 If you're just in Chrome's -- well, let me ask 12:37:30

1 it this way: Do you understand that Chrome has various
2 modes?

3 A. Please explain various mode -- modes. Are you
4 referring to Incognito mode? I'm familiar with Incognito
5 mode. 12:37:42

6 Q. No. There's five modes in Chrome: There's
7 basic mode, which is you just download the browser and
8 start using it; there's sign-in mode, where you can sign
9 in to your Google Account; there's synch mode, which I
10 don't know if you know anything about that one; and then 12:37:58
11 there's Incognito mode and guest mode.

12 Are you familiar with those modes?

13 A. All those modes. There's a lot of modes. I
14 would say after you've explained them that way, I'm
15 familiar with each of those, but I've never heard it 12:38:15
16 explained to me in five different modes of signing into
17 Google.

18 Q. Okay. And then I was asking you if you
19 understand that Google is, to use your term, intercepting
20 your data when you visit third-party websites, non-Google 12:38:28
21 websites. Let's use that term.

22 And you understand that in the modes that
23 don't -- that aren't Incognito mode, your understanding,
24 based on reading the Privacy Policy, is that Google
25 receives your data when you -- when you visit non-Google 12:38:44

1 websites; is that accurate?

2 MR. MCGEE: Object to the form.

3 THE WITNESS: So to answer your question, I

4 understand when I am not in Incognito mode that Google

5 will intercept my communications and that you've

12:39:04

6 characterized it that I've given some kind of passive

7 consent based on my review of the Terms of Service and

8 the Privacy Policy at that point to -- for them to

9 collect data and to show me ads and what have you related

10 to my searches.

12:39:24

11 But your question is only referred to when I'm

12 searching -- making browser searches in a mode that is

13 other than Incognito mode; is that correct?

14 Q. BY MR. BROOME: Yeah, and I'm not touching on

15 consent. I didn't mention consent. I'm just trying to

12:39:38

16 get your understanding of the Google Privacy Policy and

17 the type of information Google receives when you visit

18 third-party sites and apps that use Google services.

19 A. Right.

20 Q. And I specifically limited my question to, you

12:39:53

21 know, modes other than Incognito mode.

22 A. Okay. So I would -- it's my understanding that

23 Google collects that kind of data when I am not in

24 Incognito mode, per the statements that are written in

25 the Google Privacy Policy.

12:40:12

1 Q. Okay. And was that your understanding before
2 you got involved in this case?

3 A. Yes.

4 Q. Based on -- that was your understanding based on
5 reading the Google Privacy Policy? 12:40:25

6 A. That was based on my understanding reading the
7 Terms of Service, which incorporate the Google Privacy
8 Policy.

9 Q. Great. Thank you.

10 If you look at page 7. 12:40:48

11 A. Page 7. Okay.

12 Q. Yes.

13 A. The weeds here. Okay, I'm on page 7.

14 Q. The heading there that says: "Managing,
15 Reviewing and Updating Your Information"? 12:41:07

16 A. Okay. I see it.

17 Q. And it says: "We also built a place for you to
18 review and control information saved in your Google
19 Account. Your Google Account includes."

20 Do you see that? 12:41:23

21 A. "We also built a place for you to review and
22 control information saved in your Google Account. Your
23 Google Account includes." Yeah, I see that.

24 Q. Yeah. And then it lists privacy controls and
25 activity controls. 12:41:43

1 Do you see that?

2 A. Yes, I see it.

3 Q. Have you ever visited your account and explored
4 Google's privacy controls?

5 A. It's not my normal practice, but I think I've -- 12:41:56
6 I've opened it up on occasion, and I've looked at it. It
7 was very confusing to me, and there was lots of options
8 and lots of buttons and choices.

9 Q. And did you notice any privacy settings?

10 A. I think that was -- entire section was multiple 12:42:18
11 choices.

12 Q. Okay. And did you -- did you review those
13 different choices?

14 A. I think I've reviewed them over time, yeah.
15 I've looked at them occasionally. Never in one 12:42:31
16 encompassing visit where I reviewed them all and
17 understood each one because it was very confusing. It
18 seems to be constantly changing.

19 Q. On page 9. There's a heading that says: "Ways
20 To Review and Update Your Information." And then -- do 12:43:07
21 you see that?

22 A. Yes, I see it on page 9 of this document.

23 Q. And then "My Activity." And it says: "My
24 Activity allows you to review and control data that's
25 created when you use Google services like searches you've 12:43:27

Page 102

1 A. I was identifying my particular computer or
2 device.

3 Q. All right. And is it your testimony that if
4 Google -- Google had said in this sentence that we've
5 just been discussing, had said sites may deposit new 13:55:47
6 cookies on your local system, adding the word "local"
7 before "system," then you would understand this sentence?
8 But because the word "local" is not there, you can't
9 understand it?

10 MR. MCGEE: Object to the -- mischaracterizes 13:56:00
11 testimony.

12 THE WITNESS: Yeah. The only reason I used the
13 term "local" is you brought it up earlier, and it's up
14 above in the above pages. So it is clear above. Here,
15 it's vague. 13:56:15

16 Q. BY MR. BROOME: Okay. So when Google says
17 "local system," you understand that?

18 A. Yeah, it makes it more defined. It makes it
19 more specific.

20 Q. Okay. So when Google says "your system," you're 13:56:26
21 not sure what Google means?

22 A. Yeah, because earlier it said your local system
23 and now, this says your system.

24 Q. Okay.

25 A. As if there's a difference. And there might be. 13:56:35

1 I'm not an engineer. I don't know.

2 Q. When did you start using Incognito mode?

3 A. Is -- was your question when did I start using
4 Incognito mode? Is that in reference to when I ever used
5 it? 13:56:57

6 Q. When did you -- when did you first use Incognito
7 mode, approximately? I know you're not going to be able
8 to tell me an exact date.

9 A. I don't recall. I don't recall. I started
10 using it when it was -- when it was available to me. 13:57:09

11 Q. Can you give me any -- any -- any temporal
12 context whatsoever?

13 A. Some time prior to the class period.

14 Q. So some time prior to 2016?

15 A. Yes. 13:57:27

16 Q. And how frequently would you say you used it
17 over the years?

18 A. I've used it I would say fairly frequently.

19 Q. Once a day, once a week, once a month, once a
20 year? 13:57:51

21 A. I'm not -- I'm not exactly sure. I use it
22 fairly frequently.

23 Q. And are you still using it?

24 A. Yes.

25 Q. Are you still using it frequently? 13:58:23

1 Policy. You said I was in control. You said that I can
2 control what -- what Google retains and stores. And you
3 said I had this way to view the web privately using
4 Chrome Incognito mode.

5 And across our services, you can adjust your 14:00:06
6 privacy settings to control what we collect and how your
7 information is used, and you identified as the only thing
8 in here as Incognito mode is the choice to choose do that
9 in your privacy statement.

10 Q. But your testimony is that in the Privacy Policy 14:00:21
11 that only privacy settings Google identifies in the
12 entire Privacy Policy is Incognito mode?

13 MR. MCGEE: Object to the form, mischaracterizes
14 prior testimony.

15 Q. BY MR. BROOME: (Inaudible.) 14:00:46

16 THE REPORTER: Excuse me, Counsel. Can you
17 start your question again, please.

18 MR. BROOME: Are you talking to me?

19 THE REPORTER: I was. I was, yes.

20 (Interruption in proceedings.)

21 (Discussion off the record.)

22 Q. BY MR. BROOME: You were referring to the
23 March 2018 Privacy Policy, I believe. And you said:
24 "The only thing in here in Incognito mode" -- or sorry.
25 Let me back up. 14:01:34

1 It says: "I had this way to view the web
2 privately using Chrome in Incognito mode and across our
3 service, you can adjust your privacy session to control
4 what we use and how your information is used. And you
5 identify the only thing in here in Incognito mode is the 14:01:47
6 choice" -- something -- something else I don't
7 understand.

8 But you're not suggesting, are you,
9 Mr. Castillo, that the only privacy settings that Google
10 identifies in the Privacy Policy is Incognito mode, are 14:02:04
11 you?

12 MR. MCGEE: Objection. Mischaracterizes prior
13 testimony.

14 THE WITNESS: No. As I've stated, that in your
15 Privacy Policy, that you put us in control, Google puts 14:02:13
16 us in control, and it allows us to manage our --
17 manages -- it -- I can use the services in a variety of
18 ways to manage your privacy.

19 The only one mentioned under -- under the ways
20 to manage this privacy is Chrome Incognito mode. There's 14:02:31
21 many other settings for privacy that have to do when
22 you're searching in non-private mode and non-Incognito
23 mode, and they refer to when you're not using Incognito
24 mode.

25 To be -- to clarify, the Privacy Policy 14:02:48

1 identifies Incognito mode as the tool to tell Google that
2 we're not consenting to you surreptitiously intercepting
3 our communications with third-party websites. That's
4 what I'm saying.

5 Q. BY MR. BROOME: Suffice it to say you have not 14:03:06
6 enabled cookie blockers in Incognito mode since you
7 became involved in this lawsuit; correct?

8 A. That's correct. That's correct.

9 MR. MCGEE: Object to the form.

10 Q. BY MR. BROOME: Have you taken any other 14:03:19
11 precautions to prevent Google from receiving your data
12 while you're in Incognito mode?

13 A. No.

14 MR. BROOME: Why don't we take a -- why don't we
15 go off the record for a moment. 14:03:58

16 MR. MCGEE: Okay.

17 THE VIDEOGRAPHER: We are off the record. The
18 time is 2:04 p.m.

19 (Recess.)

20 THE VIDEOGRAPHER: We are back on the record. 14:15:31
21 The time is 2:16 p.m.

22 Q. BY MR. BROOME: All right. So we have marked as
23 Exhibit 8, Mr. Castillo, the new tab page.

24 A. Yeah. The way you were looking away, you were
25 speaking, so you said Exhibit 8. Then I didn't hear what 14:16:55

Page 147

1 you said afterwards.

2 Q. That's terrible. Let me -- let's go off the
3 record for one more second here. Let me see if I can
4 improve this.

5 THE VIDEOGRAPHER: We are off the record. The 14:17:05
6 time is 2:17 p.m.

7 (Exhibit 8, You've Gone Incognito screen, was
8 marked for identification by counsel
9 electronically.)

10 (Discussion off the record.) 14:17:44

11 THE VIDEOGRAPHER: We are back on the record.
12 The time is 2:18 p.m.

13 Q. BY MR. BROOME: Mr. Castillo, you should have in
14 Exhibit Share Exhibit 8.

15 A. Yes, I have it. I have it in front of me. 14:18:12

16 Q. If you go -- if you go to the second page, you
17 should see a screen --

18 A. I see it.

19 Q. -- that you're likely familiar with.

20 A. Yes. 14:18:22

21 Q. All right. And this is the -- what do you refer
22 to this document as?

23 A. This is the splash screen for Incognito mode.

24 Q. Okay.

25 A. Associated with the Google's Chrome browser. 14:18:34

Page 148

1 says the term Chrome refers to products in the Chrome
2 family?

3 A. It can say that, but Chrome is part of Google.
4 Google is Chrome. Chrome is Google. I think that's
5 pretty clear to me and everyone else in the world. 14:42:30

6 Q. Well, Chrome is part of Google. Is -- is Google
7 part of Chrome?

8 MR. MCGEE: Object to the form.

9 You can answer.

10 THE WITNESS: I would just say is a quarter 14:43:00
11 pounder with cheese part of McDonald's.

12 Q. BY MR. BROOME: And you think that's a response
13 to my question?

14 A. Yes.

15 Q. Is Google part of Chrome? 14:43:10

16 MR. MCGEE: Object to the form, asked and
17 answered.

18 THE WITNESS: Yes, I've already answered that.

19 Q. BY MR. BROOME: Does Google have products other
20 than Chrome? 14:43:22

21 A. Yes.

22 Q. You use many of them; correct?

23 A. Yes. But interesting enough, to get to, for
24 instance, Google Maps, I have to click on the Chrome
25 link. 14:43:36

1 Q. Okay.

2 A. And then it produces all the products that are
3 available. On a regular Google search, you click on the
4 Chrome link, up in the right corner, there's a little
5 drop down, there's all your stuff. I got there through 14:43:48
6 Chrome.

7 Q. Have you ever used Chrome at work?

8 A. Yes.

9 Q. Okay. Now you understood that when you've
10 browsed in Incognito mode, it would not be completely 14:44:06
11 private; correct?

12 MR. MCGEE: Objection. Asked and answered.

13 You can answer again, Mr. Castillo.

14 THE WITNESS: Say that question again. When I
15 use Chrome in Incognito mode, what did you mean -- what 14:44:15
16 are you asking?

17 Q. BY MR. BROOME: You understood that it was not
18 completely private.

19 A. Well, that's my allegation.

20 MR. MCGEE: Asked and answered. 14:44:24

21 Q. BY MR. BROOME: No. I mean before you got
22 involved in the lawsuit, you understood that Incognito
23 mode did not provide --

24 A. Well, it's a pretty vague question. It's a
25 pretty vague question. Because if I'm in Incognito mode 14:44:37

1 and I go to Lowe's and I want to buy a shovel, guess
2 what? Lowe's sees that I want to buy a shovel. And when
3 I purchase the shovel, I have to put my address in there.
4 That's not very private, is it? Because -- to Lowe's.
5 But it should be to Google, if I'm in Incognito mode, 14:44:53
6 based on the splash screen, the Google Privacy Policy and
7 the Terms of Service which are -- which include the
8 Privacy Policy on page 2.

9 Q. You understood that when you were in Incognito
10 mode, the websites you visit, regardless of, you know, it 14:45:05
11 doesn't have to be Lowe's. You understood that any
12 website you visit might be able to see your activity on
13 their site; right?

14 A. Right. And that's what it says on here. Your
15 activity might be visible to websites you visit. But it 14:45:20
16 also says Chrome won't save the following information,
17 and it lists three items on there. And that's pretty
18 much everything.

19 Q. And you understood that when you were use Chrome
20 at work, that your employer might be able to see your 14:45:36
21 activity; right?

22 A. Absolutely.

23 Q. And you understood that when you were using
24 Chrome, that your Internet Service Provider might see
25 your activity; right? 14:45:47

A. Yes. And when I'm at work, I have never used Incognito mode on Chrome.

MR. BROOME: Okay. Let's go to -- Tracy, let's have Exhibit 10. Well, let's load the search and browse privately page. I think that's tab 12. 14:46:15

THE WITNESS: Tab 12? I don't have any tabs.

Q. BY MR. BROOME: Give it a minute.

And while that's loading, Mr. Castillo, did you -- you understood when you're using Chrome in Incognito, if you went to Google.com, for example, then Google would receive your data?

A. Right, they'd receive it, but they said they wouldn't save it. The term is Chrome won't save the following information. Chrome won't save the following information.

So to answer your question, yes, but it says Chrome won't save the following information. It lists three items: Your browsing history, cookies and site data, information entered into forms. Won't save. That's what it says on the splash screen.

Q. Let me sure I got an answer there. Okay. Yep.

(Exhibit 9, How Private Browsing Works in Chrome, was marked for identification by counsel electronically.)

(Exhibit 10, Search and Browse Privately, was

1 marked for identification by counsel

2 electronically.)

3 Q. BY MR. BROOME: Are you seeing Exhibits 9 and 10
4 there, Mr. Castillo?

5 A. Okay. Let me look. Give it a second. It's 14:47:59
6 refreshing.

7 I see Exhibits 9 and 10, but I haven't opened
8 them yet. Which one do you want me to open?

9 Q. Let's go to 10 first.

10 A. Okay. 14:48:20

11 MR. MCGEE: I'd ask that the witness be afforded
12 the opportunity to review the document before any further
13 questions are asked.

14 THE WITNESS: Okay. I'm going to review this
15 document. Okay. 14:48:29

16 Q. BY MR. BROOME: Just let me know when you're
17 ready. Take as much time as you need.

18 A. Okay, I've reviewed the document.

19 Q. Have you seen this document before?

20 A. So first off, this document has no title to it. 14:51:08

21 It seems to be like a -- perhaps a screenshot or
22 something from some kind of document, and it -- it's not
23 like this is Google's Privacy Policy. It's not like the
24 Terms of Service. This is just some random paragraphs
25 that are information is -- is I've seen periodically over 14:51:27

Page 169

1 A. I can't recall.

2 Q. All right. And then it says, under the heading
3 "How Private Browsing Works in Chrome," it says, "When
4 you browse privately, other people who use the device
5 won't see your history." 15:08:22

6 Do you see that?

7 A. "When you browse privately, other people who use
8 the device won't see your history." It's similar to the
9 splash screen under Incognito. It's not the same
10 statement, but it's similar. 15:08:36

11 Q. Okay. And what does that convey to you?

12 A. That conveys to me when you browse privately,
13 other people who use the device won't see your history.
14 That's what it conveys to me.

15 Q. Okay. And what -- okay. 15:08:50

16 You read the Google Privacy Policy before you
17 got involved in this lawsuit; right?

18 A. I'm familiar with it, and I've reviewed it, yes.

19 Q. Right. And in there, Google makes pretty clear
20 that it provides advertising services to websites; right? 15:09:13

21 MR. MCGEE: Object to the form.

22 You can answer.

23 THE WITNESS: Yes, but they make that clear when
24 you're not in Incognito mode.

25 Q. BY MR. BROOME: Let's not -- one step at a time. 15:09:27

1 Google Privacy Policy makes clear to you that Google
2 provides advertising services to non-Google websites;
3 correct?

4 MR. MCGEE: Object to the form and object to the
5 questioner limiting the witness' answer. 15:09:43

6 Mr. Castillo, you can answer the question as you
7 deem appropriate. And asked and answered.

8 THE WITNESS: I've answered that question.

9 Q. BY MR. BROOME: Okay. Well, let's put it this
10 way: If you're not in Incognito mode, you're aware that 15:10:18
11 Google provides advertising services to websites; right?

12 A. Yes.

13 Q. And you were aware of that fact during the class
14 period; correct?

15 MR. MCGEE: Object to the form. 15:10:35

16 You can answer.

17 THE WITNESS: Yes.

18 Q. BY MR. BROOME: All right. Now on this page, it
19 describes what happens when you browse privately, and
20 then there's a heading that says: "Some information will 15:10:53
21 not be seen or saved." And then it says: "Your activity
22 might still be visible."

23 Do you see that heading?

24 A. Yes, I see it. It's on -- it's on this exhibit.

25 Q. Yeah. And it says: "Incognito mode stops 15:11:12

1 Chrome from saving your browsing activity to your local
2 history."

3 Do you see that?

4 A. Yeah, I see that.

5 Q. Okay. And you understand that to mean -- we 15:11:22
6 talked about this before, right -- the local -- the
7 local -- the use of the word "local" conveyed some
8 additional clarity to you, I think you said.

9 A. Well, previously you didn't use the term "local
10 history." You used a different term of local. You said 15:11:39
11 local browser, local device. This now says local
12 history.

13 Q. Okay. What does this -- what does this sentence
14 mean to you? How do you interpret it?

15 MR. MCGEE: Objection. Calls for speculation. 15:11:56

16 THE WITNESS: Yeah. I'm not an attorney, but
17 Incognito mode stops Chrome from saving your browsing
18 activity to your local history.

19 Q. BY MR. BROOME: Right. And what do you
20 understand "local history" to mean? 15:12:06

21 A. "Local history" means my device.

22 Q. Okay.

23 A. And my history tab and my history folder and my
24 local -- on my local device. That's what I take it to
25 mean. 15:12:22

1 Q. Okay. Great.

2 And then it says: "Your activity, like your
3 location, might still be visible to." Do you see that?
4 And then it lists five bullets.

5 A. Okay. So your Incognito mode stops Chrome from 15:12:36
6 saving your browsing activity to your local history.
7 Your activity, like your location, might be still be
8 visible to, and there's five bullet points. One, two,
9 three, four, five. Yes, there's five there.

10 Q. All right. The first bullet is: "Websites you 15:12:54
11 visit, including the ads and resources used on those
12 sites."

13 Do you see that?

14 A. Yes, and that makes sense. Websites you're
15 visiting can see that I'm visiting the website. I see 15:13:06
16 that.

17 Q. What about the ads and resources used on those
18 sites? How do you interpret that?

19 A. I would interpret that that, including the ads
20 and resources used on those sites, to mean the inner 15:13:18
21 workings of those websites and how they function.

22 Q. Right. Okay.

23 So are you familiar -- are you generally
24 familiar with the concept that websites may contract with
25 third parties to display ads on their sites? 15:13:35

1 MR. MCGEE: Object to the form, speculation,
2 foundation.

3 Q. BY MR. BROOME: I'm just asking you if you are
4 familiar with that concept.

5 A. I'm vaguely familiar with it. I think websites 15:13:50
6 have all kinds of things they do when you visit their
7 sites.

8 Q. BY MR. BROOME: And this bullet here makes clear
9 to you that Incognito mode -- in Incognito mode, your
10 activity might still be visible not just to the websites 15:14:05
11 you visit, but also to the ads and resources used on the
12 sites; right?

13 MR. MCGEE: Object to the form, asked and
14 answered.

15 THE WITNESS: I've answered that question 15:14:17
16 already.

17 Q. BY MR. BROOME: Well, I don't think I got an
18 answer. So why don't you humor me and answer it again.

19 A. Okay. So websites -- the question is -- ask the
20 question again so I can understand exactly what you're 15:14:30
21 saying because it seems a little tricky here.

22 Q. This bullet makes clear to you that Incognito --
23 in Incognito mode, your activity might still be visible
24 not just to the websites you visit, but also to the ads
25 and resources used on those sites; correct? 15:14:45

1 MR. MCGEE: Same objections.

2 THE WITNESS: Yes. Yes, I can see that. That's
3 what this says, yes.

4 Q. BY MR. BROOME: And then below -- below that --
5 well -- then it says -- there's a few other bullets, and 15:15:16
6 then there's a bullet that says "search engines."

7 Do you see that?

8 A. Yes, I see it. It's the fifth bullet.

9 Q. Right. And that's also under the heading "Your
10 activity might still be visible." Right? 15:15:37

11 A. Yes.

12 Q. And it says: "Search engines may show search
13 suggestions based on your location or activity in your
14 current Incognito browsing session."

15 Do you see that? 15:15:49

16 A. Yes, I see it.

17 Q. And that makes clear to you that in Incognito
18 mode, whatever search engine you're using may show you
19 search suggestions based on the activity from that
20 current Incognito session; right? 15:16:16

21 MR. MCGEE: Object to the form.

22 You can answer.

23 THE WITNESS: Yeah. Your question was it makes
24 it clear to me.

25 Q. BY MR. BROOME: Yeah. 15:16:22

1 A. That is the crux of that question. But you had
2 a lot of other information after you said that. Nothing
3 is clear to me about the way Google uses Incognito mode
4 is my answer.

5 Q. Is this sentence clear to you? 15:16:36

6 MR. MCGEE: Same objections. Asked and
7 answered.

8 THE WITNESS: I've answered that question.

9 Q. BY MR. BROOME: Is this sentence clear to you?

10 MR. MCGEE: Same objections. 15:16:47

11 Q. BY MR. BROOME: You can answer.

12 A. I've answered that question.

13 Q. I didn't get -- I don't see anywhere in your
14 testimony where you said that this sentence is clear or
15 unclear. You said that nothing was clear to you about 15:17:08
16 what Google says about Incognito mode.

17 So is it -- is it your testimony that everything
18 Google says about Incognito mode is unclear to you?

19 MR. MCGEE: Object to the form, asked and
20 answered, mischaracterizes prior testimony. 15:17:26

21 Mr. Castillo, you can answer.

22 THE WITNESS: Okay. I'm not going to speculate
23 here, but I can say that the statement reads: "Search
24 engines may show search suggestions based on your
25 local" -- "location or activity in your current Incognito 15:17:44

1 MR. MCGEE: Objection.

2 THE WITNESS: I'm not -- I -- I am just not

3 going to speculate as to something that doesn't exist.

4 Because the sentence says -- doesn't say "so." It says

5 "and," and there's a comma before it. 17:42:33

6 So I can't speculate, and I'm not going

7 speculate as to what the change in meaning would mean and

8 what that -- that's an irrelevant question that doesn't

9 even -- it has no bearing on this case, in my opinion.

10 Q. BY MR. BROOME: Is the comma and the "and" 17:42:50

11 important?

12 A. Yes.

13 Q. Okay. And with respect to the phrase "other

14 people who use this device won't see your activity," do

15 you agree that that is one way in which Incognito 17:43:05

16 provides privacy?

17 MR. MCGEE: Object to the form, calls for a

18 legal conclusion, asked and answered.

19 THE WITNESS: I've answered that question.

20 MR. MCGEE: You can answer it again, 17:43:18

21 Mr. Castillo.

22 THE WITNESS: Okay.

23 So the question I think you're asking is: Is --

24 is does the comma and "and" break it into two -- why

25 don't you ask the question again because there's a lot of 17:43:28

1 -- it's the end of the day. There's a lot of things in
2 my head here.

3 Q. BY MR. BROOME: Let's focus on the question.

4 With respect to the phrase "other people who use
5 this device won't see your activity," do you agree that 17:43:39
6 is -- that concealing your activity from other people who
7 use your device is one way in which Incognito provides
8 privacy?

9 MR. MCGEE: Same objections.

10 THE WITNESS: Yeah. I would say yes. It's one 17:43:56
11 way. It's one. It's one of two promises there.

12 Q. BY MR. BROOME: Okay. And the other promise,
13 now you can browse privately, that's an entirely separate
14 promise, in your opinion?

15 A. Yeah. I mean, you're asking me to speculate, 17:44:11
16 but yes, I -- I view it as two promises.

17 Q. How am I asking you to speculate? How am I
18 asking you to speculate?

19 A. You're asking me how to -- to -- you're asking
20 me how changing words would affect things. That's 17:44:35
21 speculation.

22 Q. That's not the question that I just asked.

23 A. So what's the -- what's the question again?

24 Q. The phrase "now you can browse privately," do
25 you see that as a completely separate and independent 17:44:45

1 promise from the phrase "and other people who use this
2 device won't see your activity"? Is that --

3 A. Yes, I see that as an entirely separate promise.

4 Q. All right. And do you believe that Google has
5 kept its promise that Incognito mode will prevent other 17:45:12
6 people who use your device from seeing your activity?

7 MR. MCGEE: Objection. Asked and answered,
8 calls for speculation.

9 THE WITNESS: I've answered this already.

10 Q. BY MR. BROOME: What's the answer? What's the 17:45:27
11 answer?

12 A. I've answered already. I'm changing my answer.

13 Q. Can you remind me what your answer was? Can you
14 remind me what your answer was?

15 A. No. It's in the record. 17:45:55

16 Q. I'm going to ask the question again.

17 Do you believe that Google has kept its promise
18 that Incognito mode would prevent other people who use
19 your device from seeing your activity?

20 MR. MCGEE: Same objections. 17:46:11

21 THE WITNESS: You're asking me the same
22 questions multiple times, and each time you ask it, you
23 increase the tempo and speed at which you cover the word
24 "privately," comma "and." And you make it one. It's
25 this is two separate promises. 17:46:28

1 STATE OF CALIFORNIA) ss:

2 COUNTY OF MARIN)

3
4 I, LESLIE ROCKWOOD ROSAS, RPR, CSR NO. 3462, do
5 hereby certify:

6 That the foregoing deposition testimony was
7 taken before me at the time and place therein set forth
8 and at which time the witness was administered the oath;

9 That testimony of the witness and all objections
10 made by counsel at the time of the examination were
11 recorded stenographically by me, and were thereafter
12 transcribed under my direction and supervision, and that
13 the foregoing pages contain a full, true and accurate
14 record of all proceedings and testimony to the best of my
15 skill and ability.

16 I further certify that I am neither counsel for
17 any party to said action, nor am I related to any party
18 to said action, nor am I in any way interested in the
19 outcome thereof.

20 IN WITNESS WHEREOF, I have subscribed my name
21 this 10th day of February, 2022.

22
23 
24

25 LESLIE ROCKWOOD ROSAS, RPR, CSR NO. 3462

EXHIBIT 54

2/11/2022 Monique Trujillo Deposition Transcript Excerpts

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA

CHASOM BROWN, WILLIAM BYATT,) Case No.
JEREMY DAVIS, CHRISTOPHER) 5:20-cv-03664-LHK-
CASTILLO, and MONIQUE TRUJILLO) SVK
individually and on behalf of)
all other similarly situated,)
)
Plaintiffs,)
)
vs.)
)
GOOGLE LLC,)
)
Defendant.)
_____)

VIRTUAL VIDEOCONFERENCE VIDEO-RECORDED
DEPOSITION OF MONIQUE TRUJILLO

Friday, February 11, 2022
Remotely Testifying from Los Angeles, California

Reported By:
Hanna Kim, CLR, CSR No. 13083
Job No. 5077549

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA

CHASOM BROWN, WILLIAM BYATT,) Case No.
JEREMY DAVIS, CHRISTOPHER) 5:20-cv-03664-LHK-
CASTILLO, and MONIQUE TRUJILLO) SVK
individually and on behalf of)
all other similarly situated,)
)
Plaintiffs,)
)
vs.)
)
GOOGLE LLC,)
)
Defendant.)
_____)

Virtual videoconference video-recorded
deposition of MONIQUE TRUJILLO, remotely
testifying from Los Angeles, California,
taken on behalf of the Defendant, on
Friday, February 11, 2022, before Hanna
Kim, CLR, CSR No. 13083.

REMOTE VIDEOCONFERENCE APPEARANCES OF COUNSEL:

For Plaintiffs:

BOIES SCHILLER FLEXNER LLP

BY: ROSSANA BAEZA, ESQ.

BY: MARK C. MAO, ESQ.

100 SE 2nd St., 28th Floor

Miami, Florida 33131

305.539.8400

rbaeza@bsfllp.com

mgao@bsfllp.com

-and-

MORGAN & MORGAN

BY: RYAN J. MCGEE, ESQ.

201 N. Franklin Street, 7th Floor

Tampa, Florida 33602

813.223.5505

rmcgee@forthepeople.com

1 REMOTE APPEARANCES OF COUNSEL: (CONTINUED)

2
3 For Defendant:

4 QUINN EMANUEL URQUHART & SULLIVAN, LLP

5 BY: JOMAIRE A. CRAWFORD, ESQ.

6 BY: TRACY GAO, ESQ.

7 51 Madison Avenue, 22nd Floor

8 New York, New York 10010

9 212.849.7000

10 jomairecrawford@quinnemanuel.com

11
12 Also Present:

13 SCOTT SLATER, Videographer

14
15
16
17
18
19
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Page 4

INDEX OF EXAMINATION

WITNESS: MONIQUE TRUJILLO

EXAMINATION	PAGE
-------------	------

BY MS. CRAWFORD:	11, 287
------------------	---------

BY MS. BAEZA:	276, 293
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QUESTIONS INSTRUCTED NOT TO ANSWER:

PAGE.....LINE

17.....17

82.....6

87.....2

--o0o--

1 A. No, I have not.

2 Q. Okay. Ms. Trujillo, is web privacy
3 important to you?

4 A. Yes, it is.

5 Q. How important, would you say? 09:49:22

6 A. Extremely important.

7 Q. Why is that?

8 A. Because it's my choice of what I want to
9 have seen openly and privately -- or privately.

10 Q. And what do you mean by, it's your choice 09:49:59
11 as to what is seen openly or privately?

12 A. Well, there's some things that I don't
13 want other people to know or see.

14 Q. Can you give me some examples of something
15 that you might not want someone else to know or 09:50:36
16 see?

17 A. Something I've looked up or a website I've
18 been to. An example would be a medium.

19 Q. What do you mean by "a medium"?

20 A. It's, like, it's searching -- 09:51:14
21 (Interruption in audio/video.)

22 THE COURT REPORTER: Could you repeat
23 that.

24 BY MS. CRAWFORD:

25 Q. Oh, okay. 09:51:20

1 THE COURT REPORTER: Could you please the
2 answer.

3 THE WITNESS: A medium or a psychic
4 website.

5 BY MS. CRAWFORD: 09:51:34

6 Q. And why is that?

7 A. Because I found that some people find it
8 offensive or I'm made to feel embarrassed about
9 looking into mediums or psychics.

10 Q. Okay. So then it seems as though what 09:52:07
11 you're saying, you know, that's information that
12 you wouldn't want other people necessarily knowing
13 about your online browsing activities; is that --
14 that a fair characterization?

15 A. That is what I'm saying. 09:52:21

16 Q. Do you take precautions to protect your
17 privacy while you're browsing the internet, for
18 example, to ensure that others wouldn't know
19 things about your activities online like, if you
20 were to visit the website of a psychic or a 09:52:40
21 medium?

22 MS. BAEZA: Objection. Form. Compound.

23 BY MS. CRAWFORD:

24 Q. You can answer.

25 A. Yes, I do take precautions. 09:52:50

1 Q. Can you identify those precautions for me.

2 A. I will put on a privacy -- I'll search
3 under a privacy setting.

4 Q. What do you mean by that; searching under
5 a privacy setting? 09:53:19

6 A. So I will search under -- I'll search in
7 incognito mode or I will search in private.

8 Q. Anything else you do?

9 A. I keep a password on my phone.

10 Q. Okay. Any other precautions you take to 09:53:52
11 ensure that your privacy is protected while you
12 browse the internet?

13 A. I delete my history.

14 Q. Tell me what you mean by that.

15 A. I will go back to a site I visited and 09:54:11
16 delete it or trash it from the screen.

17 Q. Okay. And when you say you "delete it,"
18 would you do that -- would you do those deletions
19 when you're in the private mode that you mentioned
20 entering just a moment ago? 09:54:37

21 A. Yes, I guess because it's not a document
22 and it can't really delete, so what I will do is,
23 I will I exit out is what I do.

24 Q. So just to make sure I -- I -- I
25 understand what -- what sort of process you 09:55:00

1 follow, you'll browse the web and then click out
2 of the browser window once you're done browsing to
3 ensure that there is no record, perhaps, of --
4 of -- of your visit to a specific site; is that
5 right? 09:55:21

6 A. That's right.

7 Q. Okay. Do you do anything -- actually, let
8 me ask.

9 Do you do that when you're both browsing
10 in private mode and a non-private mode? 09:55:34

11 A. It depends on what I am searching for. So
12 if it's something that I don't want anybody else
13 to see and I'm in private mode, I will exit the
14 window.

15 Q. And if you're searching for something that 09:55:58
16 you don't want someone to see when you're not in
17 private mode, would you follow the same practice?

18 A. Yes.

19 Q. Okay. Are there any other precautions --
20 oh, it looked like you were going to say 09:56:16
21 something. Were you --

22 A. No.

23 Q. -- not done answering the question? Okay.

24 A. No. Go on.

25 Q. Are there any other precautions that you 09:56:23

1 take when you're browsing the web to ensure your
2 activity remains private?

3 A. Those three precautions are mostly what
4 I -- mainly the precautions I take.

5 Q. Okay. Do you take any precautions to 09:56:54
6 protect your privacy while you're using apps as
7 distinct from web browsing?

8 A. While -- while I'm using apps?

9 Q. Yes.

10 A. I'll exit the screen. 09:57:22

11 Q. Okay. Anything else?

12 A. Not for -- I can't think of precautions on
13 apps. Let me see, actually...

14 That's it for now.

15 Q. And when you exit a screen on an app, for 09:58:03
16 example, is it to ensure that, let's say, you
17 know, someone using your phone wouldn't be able to
18 see what you were looking at or what you were, you
19 know -- what you were doing?

20 A. Yes, that's correct. 09:58:19

21 Q. Okay. Are you familiar with something
22 called a privacy policy?

23 I believe so, based on some of the
24 documents that you've looked at to prepare, but I
25 just want to confirm. 09:58:34

1 A. Yes, I'm familiar.

2 Q. And do you read privacy policies of the
3 companies whose websites you visit online?

4 A. Yes, I do.

5 Q. Okay. Is that an additional precaution 09:58:48
6 that you take, for example, reading the privacy
7 policies of the websites that you visit?

8 A. Yes.

9 Q. Would you say that you read the privacy
10 policies of most websites that you visit, some, or 09:59:06
11 none?

12 A. Most.

13 Q. Approximately how many times do you do
14 that in a given week?

15 A. In a given week, that's -- I read the 09:59:23
16 privacy policies when there's an initial account
17 setup or if there's an update.

18 Q. And how would you know whether there's an
19 update to a website's privacy policy?

20 A. I will receive an alert. 09:59:51

21 Q. Do you always -- do you know if you -- if
22 every website that you visit sends alerts when
23 their privacy policies are updated?

24 A. I don't know if every websites [sic] sends
25 a updated policy. 10:00:11

1 that you purchased, you consider that to be
2 personal information?

3	A. Absolutely. Yes.
---	---------------------

4 Q. Even if those products are not personally
5 tied to your name or to your identity? 10:42:08

6 A. Yes, even if I mean -- yes. Absolutely.

7 Q. So if you purchased let's say a -- a
8 spatula from Williams-Sonoma, you would
9 consider -- a simple line item that says "Spatula
10 purchased," you would consider that information to 10:42:34
11 be personal information to you, even if it doesn't
12 identify Monique Trujillo as the person who
13 purchased the spatula?

14 A. I would -- yes, I would consider that
15 personal, because even if it doesn't say my name, 10:42:47
16 it says everything else -- I mean, there's
17 everything else about me, and it wouldn't just be
18 a spatula.

19 If I'm shopping at Williams-Sonoma, I am
20 looking for a Star Wars spatula. You know, 10:43:05
21 it's -- if I'm -- it's something personal and
22 special to me.

23 Q. So I think I heard you say, you know,
24 there would be other information about you, but
25 what if it's just that someone purchased a Star 10:43:24

1 Wars spatula? There's no other information about
2 you. There's no other -- there -- your name's not
3 associated with it; neither your first name nor
4 your last name is associated. It's just that a
5 spatula with a Star Wars branding was purchased 10:43:39
6 from Williams-Sonoma.

7 Would that be personal to you?

8 A. Yes, it would be personal to me.

9 Q. How is that?

10 A. Because it's my choice what I chose to 10:43:49
11 purchase.

12 MS. BAEZA: Let me just assert my
13 object- -- objection here.

14 Objection. Form. Asked and answered.

15 Ms. Trujillo, if you could just give me 10:44:03
16 just one second after Jomaire finishes her
17 questions in case I have an objection.

18 THE WITNESS: Yes.

19 MS. BAEZA: That way I don't have to
20 interrupt you. I'm sorry. 10:44:14

21 BY MS. CRAWFORD:

22 Q. Now, we just went through this nine-point
23 bulleted list, and you said all this information
24 is your personal information; right?

25 A. Right. 10:44:23

1 Q. And these -- and -- and these different
2 types of information appears under a disclaimer
3 that reads "Collecting Information About You,"
4 "Categories and Types of Personal Information We
5 Collect."

10:44:41

6 Do you see that?

7 A. Yes.

8 Q. Are you comfortable with Williams-Sonoma
9 collecting these different types of data on when
10 you visit its website?

10:44:50

11 A. Well, if I'm in regular mode, then I am
12 aware that information is being collected. If I'm
13 in incognito mode, I am not okay that information
14 is being collected without my consent.

15 Q. Now, looking at the section entitled
16 "Collecting Information About You," does it say
17 anything in here about whether you're visiting the
18 website and in incognito mode or not?

10:45:17

19 A. It does not.

20 Q. And so this section does not distinguish
21 between data collected when you're browsing in
22 incognito versus a non-incognito mode; is that
23 right?

10:45:46

24 A. It doesn't say that here, but it would
25 have been my choice to search in incognito mode or

10:46:07

Page 56

1 in regular mode.

2 Q. That's right. But I'm asking about the
3 Williams-Sonoma privacy policy and the information
4 that it tells you in here that it collects when
5 you visit its website. 10:46:22

6 So I just want to be clear that nothing in
7 Williams-Sonoma's disclosure here says that the
8 type of data they collect depends on whether
9 you're searching in private mode or not; is that
10 right? 10:46:43

11 A. That's right. But what I'm concerned with
12 is -- I understand that Williams-Sonoma is
13 disclaiming here -- or giving a disclosure here
14 that they will collect all this information.
15 That's fine. 10:47:04

16 But if I'm in incognito mode, I do not
17 want third parties or Google collecting
18 information without my consent.

19 Q. How would Williams-Sonoma know if you're
20 in incognito mode or private -- sorry, in a 10:47:20
21 private mode or not when you're visiting its
22 website?

23 A. It doesn't matter if Williams-Sonoma
24 knows. It would be Google's responsibility to
25 know that I'm in incognito mode and not collect my 10:47:42

1 information.

2 Q. Right. We're going to get to Google in
3 one second, but if we could just stick with
4 Williams-Sonoma. I want to just make sure I get a
5 clear answer to the question. 10:47:57

6 How would Williams-Sonoma, in your view,
7 know that you are visiting its website in
8 incognito mode versus a regular browsing mode?

9 MS. BAEZA: Objection. Form. Asked and
10 answered. 10:48:12

11 BY MS. CRAWFORD:

12 Q. You can answer.

13 A. I don't know how Williams-Sonoma would
14 know if I'm in incognito mode or in regular mode.

15 Q. Okay. Now, we talked about this section 10:48:26
16 here which talks about the information that
17 Williams-Sonoma collects about you.

18 I'm going to ask that you turn to the
19 fifth page of this document, which talks about
20 information -- actually, the fourth page of this 10:48:42
21 document, which talks about information that
22 Williams-Sonoma shares with third parties.

23 If you go to the bottom of page 3,
24 actually, which is where the heading "Third
25 Parties" appears, can you let me know once you've 10:49:06

Page 58

1 scrolled to the third page of this document?

2 A. Hold on. It's a little blurry.

3 MS. BAEZA: I'm sorry. Jomaire, you said
4 the third page that says "Third Parties"?

5 MS. CRAWFORD: Yep, at the very bottom it 10:49:25
6 says "When We Share Information with Third
7 Parties."

8 MS. BAEZA: Okay. Thank you.

9 MS. CRAWFORD: You're welcome.

10 BY MS. CRAWFORD: 10:49:39

11 Q. And, Ms. Trujillo, just let us all know
12 when you're here.

13 A. Okay. Is it in -- is it emboldened?

14 Because I do not see -- 1, 2 --

15 Q. Yes, ma'am. 10:49:48

16 A. -- 3. I see. Okay. I see.

17 Q. Okay. So you're at the section that's
18 titled "When We Share Information with Third
19 Parties." And underneath it it lists "Service
20 Providers." 10:50:05

21 It says, "We may contract with companies
22 or persons to provide certain services including
23 credit card processing, shipping, data analysis
24 and management, promotional services, et cetera.
25 We call them our Service Providers. We provide 10:50:18

Page 59

1 our Service Pro-" -- "Providers with the
2 information needed for them to perform these
3 services. We ask that our Service Providers
4 confirm that their privacy practices are
5 consistent with ours." [As read] 10:50:53

6 Do you see that?

7 A. I do.

8 Q. Now, if you turn to page 5, you'll see,
9 three paragraphs in, a section that begins with
10 "We use." 10:51:02

11 Let me know once you're there.

12 A. I see it.

13 Q. And this paragraph, do you mind reading
14 this one aloud into the record?

15 A. "We use Google Analytics on our web sites 10:51:06
16 to collect usage data, to analyze how users use
17 the web sites and to provide advertisements to you
18 on other websites. For more information about how
19 to opt out of having your information used by
20 Google Analytics, visit..." [As read] 10:51:24

21 Q. And then there's a URL, mm-hmm.

22 A. Right.

23 Q. What do you understand this paragraph to
24 mean, Ms. Trujillo?

25 A. That when I'm on the Williams-Sonoma 10:51:37

Page 60

1 website in regular mode, Google Analytics has
2 access to my information.

3 Q. But this paragraph here doesn't contain
4 the words "regular mode," does it?

5 A. It does not contain the words -- the 10:52:02
6 word [verbatim] "regular mode," but in the Google
7 policy -- it does say "Google Analytics" on there.
8 And in the Google policy, it says that if I choose
9 to set -- to search in incognito mode, I can
10 control what is collected. 10:52:31

11 Q. Are you reviewing from a document that you
12 have in front of you?

13 A. I am.

14 Q. Okay. I would ask that while we're --
15 while we're looking at a particular document, 10:52:43
16 namely Exhibit Number 1, that you set aside the
17 other documents that you have in front of you.

18 I'll let you know if there's a point where
19 it would be helpful for you to look at one of the
20 documents that you have. But I ask that our -- 10:52:57
21 the questions I'm asking are limited to the
22 document and exhibit that we're focused on right
23 now.

24 And I'll let you know, again, if I need
25 you to reference any of the other materials in 10:53:07

1 front of you.

2 Do you mind doing that for me?

3 A. I do not mind.

4 Q. Okay. So then in -- in this paragraph

5 here that begins with "We use Google Analytics on 10:53:17

6 our web sites," I just want to confirm that

7 nowhere in that paragraph does it reference

8 "regular mode."

9 Would you agree with that?

10 A. Well, I can't agree with it because even 10:53:36

11 if I don't reference any documents or other

12 policies, I know that in regular mode I am

13 consenting to Google Analytics collecting my

14 information.

15 Q. But, Ms. Trujillo -- oh, sorry. Go ahead 10:53:52

16 if you're still answering the question.

17 Okay.

18 A. If I'm --

19 MS. BAEZA: Go -- go ahead, Ms. Trujillo.

20 You can finish. 10:54:10

21 THE WITNESS: Without referencing any

22 documents or policies, I know that if I'm in

23 cogni- -- incognito mode, Google has promised not

24 to collect my information.

25 BY MS. CRAWFORD: 10:54:29

1 Q. Right. But, again, I -- I mentioned a
2 moment ago we're going to talk about Google and
3 Google's privacy policy and Google's disclosures
4 and the information that you consider to be
5 relevant in those documents. 10:54:40

6 But before we get there, I'm just asking
7 about the Williams-Sonoma policy that's in front
8 of you.

9 Can I get a straight answer, yes or no, to
10 the -- two questions, whether or not this portion 10:54:51
11 of Williams-Sonoma's policy mentions "incognito
12 mode" or -- or pri- -- or "non-private browsing
13 mode" specifically? Yes or no?

14 MS. BAEZA: Objection. Form. Asked and
15 answered. 10:55:06

16 The -- Ms. -- Ms. Crawford, Ms. Trujillo
17 is trying to give answers to the best of her
18 ability. I think it's improper to ask her to
19 answer just a yes-or-no question.

20 MS. CRAWFORD: Well, the witness can say 10:55:23
21 if -- if she's incapable of -- of answering yes or
22 no as to whether or not certain words appear in the
23 context of language she's just read. And if the
24 witness is unable to do so, she can let us know
25 that. 10:55:35

1 Q. You can answer.

2 A. Yes, I do.

3 Q. And that's -- what evidence is that?

4 MS. BAEZA: Objection. One moment.

5 Monique, to the extent that this calls for 12:17:30
6 communications between you and counsel, I'm
7 instructing you not to answer. But you can answer
8 if you -- if you can without revealing those
9 communications.

10 THE WITNESS: The evidence I have is 12:17:40
11 the -- what the -- what my attorneys and what --

12 MS. BAEZA: One moment. One moment.

13 Don't -- Monique, as -- as -- you can answer the
14 question as long as you're not revealing the
15 communications that you've had with your attorneys. 12:18:02

16 Okay?

17 THE WITNESS: Yes.

18 MS. BAEZA: Okay. Go ahead.

19 THE WITNESS: What the experts have found.

20 BY MS. CRAWFORD: 12:18:18

21 Q. Okay. Are you aware, Ms. Trujillo, that
22 you can opt out of Google's use of certain of your
23 data by visiting ad settings, a website on -- that
24 Google offers, adsettings.google.com, and turning
25 off something that's called ad personalization? 12:18:46

Page 110

1 Are you aware of that?

2 A. No, I'm not.

3 Q. I think I -- I -- I asked earlier if you
4 had done any research online about protecting your
5 privacy, and I think that you said you had not. 12:19:01

6 But if you uncovered information like what
7 I'm describing to you now, "my activity" and the
8 ads personalization feature that I mentioned you
9 could disable, is that something that at the very
10 least you would be interested in learning more 12:19:17
11 about?

12 A. Yes, it's something I would look into.

13 Q. All right.

14 Do you have any understanding of what a
15 VPN or a proxy server is? 12:19:37

16 A. No, I do not.

17 Q. Okay. So to your knowledge, you've --
18 have you -- you've never used a VPN or a proxy
19 server on any browser?

20 A. To my knowledge, I have not. 12:19:49

21 Q. What about a firewall?

22 A. I have not used a firewall.

23 Q. What about something called "AdGuard" or
24 "AdLock," which are ad blocker programs?

25 A. I have not. 12:20:19

1 Q. Do you have an opinion, one way or the
2 other, about the kinds of advertising that you see
3 when you visit websites online?

4 A. Yes, I have an opinion on the
5 advertisements I see. 12:20:40

6 Q. And what opinion is that?

7 A. It depends on what the advertisement is.

8 Q. Can you say a little bit more there? For
9 example, is it, you know, your belief that some
10 ads are helpful or useful, other ads maybe less 12:20:58
11 so?

12 A. Yes, that's how I feel about it. I mean,
13 some ads are helpful, useful. Some ads are
14 just -- some are helpful and useful.

15 Q. Can you give me an example of one ad, you 12:21:38
16 know, over the years, perhaps, or recently that
17 you encountered online that you did consider to be
18 helpful or useful?

19 A. Let's see.

20 Around the holidays when I get a -- an 12:22:16
21 advertisement for a store and there's a coupon,
22 that's helpful and useful.

23 Q. And by getting an advertisement for a
24 coupon, you mean like you may be visiting a
25 website, let's say williams-sonoma.com, and an ad 12:22:38

1 A. Yes.

2 Q. Tried it out for a bit?

3 A. Yes.

4 Q. Safe to say you enjoyed the experience?

5 A. Yes. And I found over time that some -- 12:27:34
6 in the workplace, I had to have -- or they were
7 using primarily Chrome.

8 Q. Okay. So was that beneficial to you, in
9 any way?

10 A. Yes, it was beneficial because I could 12:27:59
11 access the different services.

12 Q. And what services do you have in mind or
13 were you using back then?

14 A. Being able to browse the web at a decent
15 pace or a decent speed. 12:28:30

16 Q. Okay. Anything else beyond using the
17 Chrome browser in terms of the Google services
18 that you just mentioned?

19 A. Anything else such as?

20 Q. You mentioned that it was beneficial 12:28:55
21 because you could access the different services.

22 A. Mm-hmm.

23 Q. So I'm wondering, besides using Chrome to
24 browse the web, were there any other Google
25 services that you had in mind? 12:29:05

Page 116

1 A. Gmail.

2 Q. Okay. Anything else? It's okay if -- if
3 you -- if you don't have anything. Again, it's
4 not designed to be a memory test. If you happen
5 to know. 12:29:32

6 A. Gmail, Google search.

7 Q. Okay. So you used Chrome in 2008. You
8 used it in the years that followed as well; is
9 that -- is that right?

10 A. Yes. 12:29:51

11 Q. Okay. Do you still use Chrome to this
12 day?

13 A. Yes.

14 Q. Okay. How often would you say that you
15 use Chrome this year, in 2022? Do you use it 12:30:01
16 every day, a couple times per week, or on some
17 other cadence?

18 A. On a daily basis.

19 Q. Okay. Do you use Chrome in both modes,
20 incognito and a non-incognito mode daily? 12:30:22

21 A. It depends on what I'm looking at or what
22 I'm visiting. I'll use incognito if I want it to
23 be private. And that varies from day-to-day.

24 Q. Okay. When did you first start having
25 concerns, Ms. Trujillo, about Google's collection 12:30:48

1 about your data?

2 A. I would say six or seven years ago when I
3 started using incognito, I started noticing
4 things. And when I read the article about Google
5 tracking information while I'm in incognito mode, 12:31:36
6 it really resonated with me because it angered me
7 that this was affecting my privacy and my
8 browsing.

9 Q. Okay. And you started using Chrome in
10 2008. When did you start using incognito mode for 12:31:58
11 Chrome?

12 A. About 2015, 2016 -- 2016.

13 Q. Any reason why you weren't using incognito
14 mode to safeguard your privacy online before 2015?

15 A. It was 2016. And I hadn't known about 12:32:21
16 incognito mode before then.

17 Q. So from 2008 to 2016, that eight-year --
18 entire eight-year period where you were using
19 Chrome, you were not aware that there was a
20 feature in the browser called "incognito mode"? 12:32:42

21 A. That's correct, I was not aware.

22 Q. Okay. And is it your testimony that at no
23 point prior to 2016 did you review -- sorry, did
24 you use Chrome in incognito mode?

25 A. That's correct. Before that time, I had 12:33:02

1 MS. BAEZA: Objection. Form. Compound.

2 BY MS. CRAWFORD:

3 Q. You can answer.

4 A. I know that my -- some of my information
5 is visible, but when I'm in incognito mode, it's 02:00:47
6 not supposed to be collected.

7 Q. Okay. So what types of information do you
8 believe is visible when you're in incognito mode?

9 A. What types of information? Where I'm --
10 what site I'm visiting. The site that I'm 02:01:20
11 visiting.

12 Q. Any -- any other information that you
13 believe is visible when you're in incognito mode?

14 A. Hmm. Just what I'm visiting.

15 Q. Okay. 02:02:01

16 MS. CRAWFORD: I'm going to introduce
17 what's been previously marked as Exhibits 3 and 4.

18 (Trujillo Deposition Exhibit 3 was
19 marked.)

20 (Trujillo Deposition Exhibit 4 was
21 marked.)

22 BY MS. CRAWFORD:

23 Q. We're loading that for you now,
24 Ms. Trujillo. Please let me know when you can see
25 those exhibits on your end. 02:02:23

Page 139

1 A. I have 3 and 4. Which one would you like
2 me to open first? 3?

3 Q. I believe 3 is Tab 25 on my end. Tracy
4 will tell me know if that's not right, in which
5 case, you -- we can start there with Exhibit 3. 02:02:58

6 A. I see it.

7 Q. Okay. Now, if you could, this should be a
8 three-page document. I'm going to ask that you
9 look at the first page and confirm that the
10 heading on the document reads "Incognito NTP," or 02:03:14
11 new tab page "Message since 2016."

12 Do you see that?

13 A. I do.

14 Q. Okay. And do you see the first heading
15 underneath that, bears the date February 18th of 02:03:26
16 2016.

17 Do you see that as well?

18 A. I do.

19 Q. Can you read this section to yourself and
20 let me know once you're done. 02:03:39

21 A. Yes.

22 (Witness reviews.)

23 Okay. I've read it.

24 Q. Do you see the section that starts with
25 the word "However"? 02:04:25

1 A. Yes.

2 Q. The sentence reads in full: "However, you
3 aren't invisible." It then says: "Going
4 incognito doesn't hide your browsing from your
5 employer, your internet service provider, or the 02:04:43
6 websites you visit."

7 Do you see that?

8 A. Yes.

9 Q. What do you understand this -- these two
10 sentences to mean? Is it consistent with what you 02:04:52
11 just testified to a moment ago, which is that you
12 do not -- not believe that when you're in
13 incognito you are invisible?

14 A. I did not say that I believe I am
15 invisible. Correct? That's what you're saying? 02:05:13

16 Q. Well, I'm asking if you agree with the
17 representation here where it says "you are not
18 invisible." I thought you testified that
19 incognito, in your view, does not mean that you
20 are invisible. But if you don't agree with that, 02:05:30
21 you can -- you know -- you can -- you can clarify.

22 MS. BAEZA: Objection. Form. Lack of
23 foundation.

24 Jomaire, are you representing that all
25 these -- all this language was the actual 02:05:42

1 disclosure in effect at the time period listed
2 above?

3 MS. CRAWFORD: Yes, I am.

4 BY MS. CRAWFORD:

5 Q. You can answer. 02:05:56

6 A. I'm stating that I do understand that I'm
7 not invisible to employers.

8 Q. Do you see where it says here "Going
9 incognito doesn't hide your browsing" and then
10 lists "employer, your internet service provider, 02:06:20
11 or the websites you visit"?

12 Do you see that?

13 A. Yes, I do see that.

14 But what my concern is that Google is
15 collecting my information when I'm visiting these 02:06:34
16 other websites in incognito mode.

17 Q. So you just mentioned doing queries in
18 incognito mode on google.com. Would you expect
19 google.com to receive your information when you
20 run a search on that website? 02:06:53

21 MS. BAEZA: Objection. Form. Vague as
22 to "Google."

23 BY MS. CRAWFORD:

24 Q. You can answer.

25 A. If I'm on the Google website and I'm 02:07:05

1 searching in incognito mode, I know that I'm
2 visible.

3 Q. Visible to whom?

4 A. To the website that I'm on.

5 Q. Including google.com? 02:07:21

6 A. If I'm on Google in incognito mode.

7 Q. Do you want websites that you visit in
8 incognito mode or in another private browsing mode
9 to know that you're browsing privately?

10 A. Do I want the websites to know that I'm 02:07:57
11 browsing privately? Yes.

12 Q. So, for example, if you ran a search --
13 you know, let's say you looked at
14 Tylerhenry.com --

15 A. Mm-hmm. 02:08:16

16 Q. -- or Sylviabrowne.com or
17 Longislandmedium.com, would you want them to know
18 that you were searching their websites using a
19 private mode, or would you rather them not know
20 that you were visiting what you considered to be a 02:08:30
21 sensitive website?

22 MS. BAEZA: Objection. Form. Compound.

23 BY MS. CRAWFORD:

24 Q. You can answer.

25 A. If I'm on incognito mode, then I would 02:08:40

1 like the websites to -- I don't know how that
2 works, but I would prefer that I'm -- that the
3 websites know that I am in private, that I am
4 preferring to be private.

5 Q. Would you want Expedia or Booking.com to 02:09:13
6 know that you were searching in a private browsing
7 mode?

8 A. Yes.

9 Q. Even though knowing that you were in a
10 private browsing mode could change the pricing 02:09:25
11 that it -- that they provide you when you search
12 for flight information?

13 MS. BAEZA: Objection. Form. Calls for
14 speculation.

15 THE WITNESS: Would I like Expedia or 02:09:35
16 Booking.com to know?

17 BY MS. CRAWFORD:

18 Q. Yeah, would you like them for them to know
19 that you're using a private mode to avoid getting
20 differential pricing or would you rather them not 02:10:02
21 know and give you pricing that's more uniform or
22 consistent?

23 MS. BAEZA: Objection. Form. Compound.
24 Also calls for speculation.

25 BY MS. CRAWFORD: 02:10:14

1 BY MS. CRAWFORD:

2 Q. Yes.

3 A. I do -- I'm on the correct exhibit.

4 Q. Okay. Perfect.

5 You see where it says: "When you use our 03:37:56
6 services, you're trusting us with your
7 information"?

8 A. Yes, I see that.

9 Q. And then do you see underneath the --
10 there's an underline maybe about a third of the 03:38:09
11 way into the page. And then it says: "We build a
12 range of services that help millions of people
13 daily."

14 Do you see that there?

15 A. Yes. 03:38:21

16 Q. Okay. And you see under the section that
17 starts "Our services include"?

18 Do you see the second bullet there?

19 A. The second bullet?

20 Q. Yes. Can you read that bullet for me? 03:38:36

21 A. "Platforms like the Chrome browser and
22 Android operating system."

23 Q. Okay. So based on that, do -- do you
24 understand Chrome to be one of the services that
25 Google offers to consumers? 03:38:51

Page 189

1 A. Yes.

2 Q. Okay. Now if we could, let's look at
3 page 3. And specifically, at the bottom, there's
4 a section called "Information we collect as you
5 use our services." 03:39:18

6 Do you see that?

7 A. One moment.

8 Yes.

9 Q. And at the top of the next page, it says:
10 "The information we collect includes." 03:39:28

11 Do you see that?

12 A. Yes.

13 Q. Do you remember reviewing this version of
14 the privacy policy at any -- at any point
15 post-2018? 03:39:44

16 A. I don't remember.

17 Q. Okay. Can you read through this paragraph
18 here, and let me know when you're done.

19 A. (Witness reviews.)

20 I am done. 03:40:28

21 Q. Okay. What do you understand this
22 paragraph to mean, Ms. Trujillo?

23 A. I understand it to mean that when I am in
24 regular mode, my information is collected.

25 Q. The types of information that appear here, 03:41:10

1 do you consider that to be personal information --

2 A. Yes.

3 Q. -- if you were in regular -- sorry.

4 If you were in regular mode, would you

5 consider the information that's listed here to be 03:41:22
6 personal information?

7 A. Yes.

8 Q. Would you consider that information to be
9 sensitive if you were in regular mode?

10 A. Yes. 03:41:34

11 Q. And would you consider that information to
12 be confidential if you were in regular mode?

13 A. Yes.

14 Q. Now, tell me where in this paragraph here
15 it says that Google would only collect this 03:41:48
16 information if you were not in private browsing
17 mode?

18 Do you see any representation within this
19 paragraph along those lines?

20 A. I see that in the privacy policy, it 03:42:13
21 promises when I am in incognito mode, my
22 information will not be collected.

23 Q. Where do you see that? Can you point me
24 exactly to where it says that in this policy?

25 A. It's in the most rec- -- most updated 03:42:37

1 explanation?

2 A. It's just -- the two -- it's like the two
3 promises on the splash screen. It's just
4 conflicting with what the privacy policy says.

5 Q. This document conflicts with the privacy 04:39:38
6 policy; is that what you mean --

7 A. Yes.

8 Q. -- or something else? Okay.

9 A. That's what I mean.

10 Q. So this document here conflicts with the 04:39:47
11 privacy policy.

12 How does it conflict with the privacy
13 policy?

14 A. Because it's -- let me see. "When you
15 browse privately." 04:40:19

16 Q. Are you able to identify any way which
17 this document conflicts with the privacy policy?
18 If not, that's fine. I can ask the -- the -- the
19 next question.

20 A. Well, it's saying that I'm able to browse 04:40:57
21 privately and other people can't see my history,
22 but that's not what's happening --

23 Q. Okay.

24 A. -- when I'm in incognito mode.

25 Q. Okay. So you believe this -- this page to 04:41:11

Page 217

1 be a misrepresentation or just a con- -- something
2 that conflicts with the privacy policy?

3 A. Both.

4 Q. Okay. Now, do you see under the section
5 that reads "Your activity might still be visible"? 04:41:33

6 A. Yes.

7 Q. Do you see that section?

8 A. Yes.

9 Q. And there's a sent- -- a sentence that
10 begins with "Incognito mode," says: "Incognito 04:41:41
11 mode stops Chrome from saving your browsing
12 activity to your local history."

13 Do you see that?

14 A. Yes.

15 Q. Again, another reference to local history. 04:41:53

16 The next sentence says: "Your activity
17 might still be visible to," and then the first
18 bullet reads: "Websites you visit, including the
19 ads and resources used on those sites."

20 Do you see that bullet? 04:42:14

21 A. Yes.

22 Q. Do you remember the Williams-Sonoma
23 privacy policy that we discussed in the very
24 beginning of the deposition?

25 A. Yes. 04:42:24

1 Q. And do you remember when it mentioned that
2 Google Analytics was one of Williams-Sonoma's
3 partners?

4 A. Yes.

5 Q. Do you remember the portion of 04:42:35
6 Williams-Sonoma's privacy policy that says it
7 shares data with Google Analytics because Goggle
8 Analytics renders services to the website?

9 Do you remember that?

10 A. I remember that. And that is if it's in 04:42:53
11 regular mode, not in incognito.

12 Q. But the Williams-Sonoma privacy policy
13 didn't make that disclaimer, did it?

14 A. No. The Google privacy policy does.

15 Q. Okay. So if this docu- -- this document 04:43:17
16 that you have in front of you here says that "your
17 activity may be visible to websites you visit,"
18 [as read] let's say, Williams-Sonoma, "and the ads
19 and resources used on those site," let's say
20 Google Analytics. 04:43:35

21 Is it safe to assume that this section of
22 this document here is telling you that if you
23 visit Williams-Sonoma, your activity might still
24 be visible to ads and resources like Google
25 Analytics? 04:43:56

1 A. If I'm in regular mode, yes. If I'm in
2 incognito mode, no.

3 Q. Where here does it say that incognito mode
4 will prevent that from happening? Because as you
5 can see --

04:44:13

6 A. I --

7 Q. -- at the top, the -- I'm sorry. Go
8 ahead.

9 The -- the top of the page says "How
10 private browsing works." So the total page is
11 about incognito.

04:44:19

12 MS. BAEZA: Just a moment, Jomaire. I --
13 I don't think Ms. Trujillo was done with her answer
14 before you began speak --

15 MS. CRAWFORD: Oh, she -- she continue.
16 Sorry. Didn't mean to cut you off, either. There
17 might be a lag. I am happy to -- to cede the floor
18 and let witness continue answering the question.

04:44:32

19 MS. BAEZA: Did you have something --

20 BY MS. CRAWFORD:

04:44:34

21 Q. Go ahead, Ms. Trujillo.

22 MS. BAEZA: Did you have something else to
23 add, Ms. Trujillo?

24 THE WITNESS: It's stated in the privacy
25 policy. And this is -- this document is not the

04:44:51

CERTIFICATE OF REPORTER

I, Hanna Kim, a Certified Shorthand Reporter, do hereby certify:

That prior to being examined, the witness in the foregoing proceedings was by me duly sworn to testify to the truth, the whole truth, and nothing but the truth;

That said proceedings were taken before me at the time and place therein set forth and were taken down by me in shorthand and thereafter transcribed into typewriting under my direction and supervision;

I further certify that I am neither counsel for, nor related to, any party to said proceedings, not in anywise interested in the outcome thereof.

Further, that if the foregoing pertains to the original transcript of a deposition in a federal case, before completion of the proceedings, review of the transcript [] was [] was not requested.

In witness whereof, I have hereunto subscribed my name.

Dated: 16th day of FEBRUARY, 2022



Hanna Kim, CLR, CSR No. 13083

EXHIBIT 55

WILLIAM-SONOMA PRIVACY POLICY (Trujillo Ex. 1)

Legal Statement | Williams Sonoma

 williams-sonoma.com/customer-service/legal-statement.html

Last Updated: JUNE 2020

Privacy Policy

We are part of the Williams-Sonoma, Inc. Brands which includes Williams-Sonoma, Pottery Barn, pottery barn kids, Pottery Barn Teen, west elm, Rejuvenation and Mark and Graham. Williams-Sonoma, Inc. Brands are committed to respecting your privacy. The purpose of this Privacy Policy is to inform you what information we collect from you, how we use your information and the choices that you have regarding our use of your information. This Privacy Policy applies to information we collect about you in our stores, through our websites and mobile applications, and anywhere else we interact with you. By using any of our web sites, mobile applications, or sharing your information with us, you are accepting and consenting to the practices described in this Privacy Policy.

Williams-Sonoma, Inc. Brands support and adhere to the guidelines and practices adopted by the Direct Marketing Association's Privacy Promise to American Consumers. We have agreed to (1) provide customers with notice of their ability to opt out of information rental, sale, or exchange with other marketers; (2) honor customers' requests not to share their contact information with other marketers; and (3) honor customers' requests not to receive mail, telephone, or other solicitations from Williams-Sonoma, Inc. Brands.

Collecting Information About You

Categories and Types of Personal Information We Collect

We collect the following categories and types of personal information:

- Contact Information: your first and last name, postal address, email address, and phone number;
- Other identifying information: IP address, social media user names, passwords and other security information for authentication and access;
- Financial Information: credit card, debit card and bank account information;
- Demographic information: gender, age, employment information and salary information;
- Geolocation data;
- Internet or other electronic activity: your browsing and click history, including information about how you navigate within our services and which elements of our services you use the most;
- Commercial information: products purchased or viewed on our website;

**Exhibit
GO- 0001**

2/11/2022

Monique Trujillo - V1

- Audio and visual information: your videos and photos; and
- Inferences drawn from the categories described above in order to create a profile about you to reflect your preferences, characteristics, behavior and attitude.

Categories of Use

- **Transactional Purposes:** We use your contact information, financial information, and commercial information to:
 - Receive, process, confirm, send and track your order, subscription or registration;
 - Communicate with you about your order, subscription or registration;
 - Process any subscription or registration you make to one of our services; and
 - Maintain your "Gift List" through your registry
- **Analytical Purposes:** We use your other identifying information, internet activity and browsing history, commercial information, demographic information, and geolocation data to analyze preferences, trends and statistics.
- **Marketing and Promotional Purposes:** We use your contact information, commercial information, demographic information, internet or other electronic activity, geolocation data, and inferences to:
 - Inform you of our new products, services and offers;
 - Provide you with targeted advertising;
 - Run contests, promotions and sweepstakes,
 - Provide you with our loyalty program including earning points and awarding and redeeming certificates; and
 - Provide you with other information from and about Williams-Sonoma, Inc. Brands, including personalized marketing communications.
- **Maintenance and Improvement of Services and Website:** We use your contact information, commercial information, and internet activity and browsing history to:
 - Provide and maintain our Design Lab services;
 - Provide and maintain functionality on our website, including our live chat or customer review features;
 - Handle your customer services requests; and
 - Help us diagnose technical and service problems and administer our stores, websites and apps.
- **Review and Content Creation Purposes:** We use your contact information, commercial information, and audio and visual information to enable reviews of our products and to display content that you have created and allowed us to display on our website and services and on social media.

- **Security and Fraud Prevention:** We use your contact information, other identifying information, commercial information, financial information, geolocation data, internet activity and browsing history, and inferences to protect this website, our company, and others and to prevent fraud, theft and misconduct.

Sources of Personal Information

We collect information from the following sources:

We collect information directly from you. We collect contact and demographic information directly from you. We also collect payment information from you.

We collect information about you from third parties. We collect your personal information from third parties, such as social media sites and data co-ops. We use the Google Maps service on our web sites and may use the Google Maps service, and other services, to collect geolocation data. We use this information to create greater ease of use in our checkout, including to suggest your shipping and billing address, or to help you find the closest store location. The Google Maps service is governed by Google's privacy policy located at www.google.com/policies/privacy. We may collect your identifying information from Facebook, in accordance with their terms of use and privacy policy. We purchase from and trade contact information, demographic information, commercial information, and internet and electronic activity with data co-ops and other third party data aggregators.

We collect information from you passively. We collect Internet or other electronic activity passively using tools like browser cookies. This activity is further described in the Advertising and Online Tracking section below.

Combining Information

We may combine information you give us online, in our stores, or through our catalogs. We may also combine that information with publicly available information and information we receive from or cross-reference with third parties. We use that combined information to enhance and personalize your shopping experience with us, to communicate with you directly about our products and events that may be of interest to you, and for other promotional and commercial purposes.

When We Share Information with Third Parties

Our Service Providers

We may contract with companies or persons to provide certain services including credit card processing, shipping, data analysis and management, promotional services, etc. We call them our Service Providers. We provide our Service Providers with the information needed for

them to perform these services. We also ask our Service Providers to confirm that their privacy practices are consistent with ours.

Our Select Partners

From time to time we might establish a business relationship with other persons or entities whom we believe trustworthy and whom we have asked to confirm that their privacy policies are consistent with ours. These are known as our Select Partners. In such cases we might rent, exchange, share and/or cross-reference information, including contact information about you that will enable such persons or entities to contact you regarding products and services that may be of interest to you. This section does not apply to mobile phone numbers and opt in consent information collected for SMS text programs. Williams-Sonoma, Inc. Brands may also collect mobile phone numbers for other purposes which are subject to this section.

Our Affiliates

We may share personal information with businesses controlling, controlled by, or under common control with any Williams-Sonoma, Inc. Brands.

Corporate Transactions

We may share personal information with parties to business transactions such as those we deal with in mergers, acquisitions, joint ventures, sales of assets, reorganizations, divestitures, dissolutions, bankruptcies, liquidations, or other types of business transactions. In these types of transactions, personal information may be shared, sold, or transferred, and it may be used subsequently by a third party.

Law Enforcement and Courts

In certain instances we may disclose your contact information when we have reason to believe that it is necessary to identify, contact or bring legal action against persons or entities who may be causing injury to you, to Williams-Sonoma, Inc. Brands or to others. We may also disclose your contact information when we believe the law or legal process requires it.

Cookies

When you visit our web sites, we send one or more cookies to your computer or other device. We may also use cookies and other similar technologies in emails that you receive from us. A cookie is a small data file that is placed on the hard drive of your computer when you visit a web site. A session cookie expires immediately when you end your session (i.e., close your browser). A persistent cookie stores information on the hard drive so when you end your session and return to the same web site at a later date the cookie information is still available. We use cookies to improve the quality of our service when you visit our web site and other web sites of interest to you. We also use cookies to remind us of who you are, tailor our

products, services and advertising to suit the personal interests of you and others, estimate our audience size, assist our online merchants to track visits to and sales at our web sites and to process your order, track your status in our promotions, contests and sweepstakes, and/or analyze your visiting and email interaction patterns.

If you would like to opt out of accepting cookies altogether, you can generally set your browser to not accept cookies or to notify you when you are sent a cookie, giving you the chance to decide whether or not to accept it. However, certain features of our web sites or other services may not work if you delete or disable cookies.

We use Google Analytics on our web sites to collect usage data, to analyze how users use the web sites and to provide advertisements to you on other websites. For more information about how to opt out of having your information used by Google Analytics, visit <https://tools.google.com/dlpage/gaoptout/>.

Advertising and Online Tracking

We allow third-party companies to serve ads and/or collect certain information when you visit our web sites. These companies may use information (e.g., click stream information, browser type, time and date, subject of advertisements clicked or scrolled over) collected during your visits to this and other web sites in order to provide advertisements about goods and services likely to be of interest to you. These companies may also tie identifiers associated with a particular browser or device to identifiers associated with other browsers or devices used by the same user or household (e.g., a device identifier associated with a user's computer may be tied to the device identifiers of that user's tablet and phone) in order to measure and target advertisements tailored to user interests across their devices and to send personalized marketing communications. These companies typically use a cookie or third party web beacon to collect this information. Our systems do not recognize "Do Not Track" signals, but several of these third party companies who utilize these cookies or beacons on our web sites enable you to opt out of this behavioral advertising. To learn more or opt out from these companies you can visit <http://www.networkadvertising.org/choices/> and <https://www.aboutads.info/choices/>. We also provide you with additional tools to opt out of marketing from us or certain transfers of your information. You can learn about this in the "Opting Out of Marketing and Transfers" section of this Privacy Policy.

Opting Out Of Marketing And Transfers; Updating Information About You

We want to communicate with you only if you want to hear from us. If you prefer not to receive direct marketing from us or from our Select Partners, or if you would like to opt out of our rental or exchange of your information with other marketers, please let us know. In the U.S., you can call us at 800.541.1262 or send us an email. Outside of the U.S., you can call us at 405.717.6139 or send us an email. Please be sure to include your full name, email address,

mailing address, and specifically what information you do not want to receive. If you would like to update or correct your email address, mailing address or other contact information with us please contact us the same way. If you like, you may use one of the following statements in your message to us:

- I prefer not to receive email advertisements, such as updates regarding products and services, special promotions or upcoming events.
- I prefer not to receive direct mail advertisements, such as periodic catalogs and mailings regarding products and services, special promotions or upcoming events.
- I prefer not to have my contact information provided to third parties for their marketing purposes.

You may also click the designated link at the bottom of all email advertisements to be removed from future email updates.

Please note that any requests to remove or update your contact information may take up to five days for your email request and 6-8 weeks to process your postal mail request.

We may need to contact you via phone, email or mail to address questions or issues specific to your order, entry, etc., even if you have opted to not receive marketing communications from us. We contact you only in ways compatible with your communications choices. To the extent necessary for such purposes, we take reasonable steps to make sure that your contact information is accurate, complete, current, and otherwise reliable.

California Customer Privacy Rights

If you are a California resident, you have certain privacy rights under the California Consumer Privacy Act ("CCPA Rights"). This section describes those rights and how you can exercise them with Williams-Sonoma, Inc. Brands.

CCPA Rights Requests

Right to Know and Right to Deletion

You can request what personal information we have collected, used, disclosed, and sold in the preceding 12 months.

You can also request that we delete your personal information. We may not delete all of your personal information if one of the following exceptions applies:

- **Transactional:** to complete a transaction for which the personal information was collected, provide a good or service requested by you, or perform a contract we have with you;
- **Security:** to detect data security incidents;
- **Error Correction:** to debug or repair any errors;

- **Legal:** to protect against fraud or illegal activity or to comply with applicable law or a legal obligation, or exercise rights under the law, such as the right to free speech; or
- **Internal Use:** to use your personal information, internally, in a lawful manner that is compatible with the context in which you provided the information (i.e. to improve our services).

Please note that if we delete your personal information, many of our services will not work the same. Some examples include, but are not limited to:

- **Returns:** We will not have the ability to look up your receipt or order in our system. In order to process a return or refund, we will require proof of purchase from the customer and if the customer is unable to provide proof of purchase, the transaction will be treated as an unreceipted return in accordance with our return policy.
- **Customer Service:** Our ability to handle customer service requests may be limited. We will not have the ability to look up prior orders or account information and may request proof of purchase in order to service your needs.
- **Online Account & Shopping:** Your online account will no longer exist. Your shopping cart items, order history, saved addresses, saved recipes and any other saved preferences in your online account will no longer be available.
- **Loyalty Program:** You will lose your loyalty account and any points earned as part of your participation in Key Rewards. You will not be able to accrue loyalty points moving forward. Any existing reward certificates will be honored. You will also no longer be eligible for loyalty specific benefits such as exclusive events and early access offers.
- **Recalls:** We will no longer be able to contact you via email, regular mail, or phone about product recalls related to products you purchased, unless you provided your information to us by returning a product registration card attached to a durable infant product.
- **Gift Registry:** You will no longer be able to view or add items to your gift registry. Reference to your name in a joint registry will be deleted.
- **Marketing Communications:** We will no longer be able to provide you with any marketing communications directly from our family of brands, including personalized marketing communication such as information about new products, services and offers tailored to your interests.
- **Opt Outs:** Previous opt-out requests will not be saved.

To submit a request to know or a request to delete, please visit [Truyo Portal](#). or call 833.922.7529. In order to verify your identity, you will need to provide at least three of the following pieces of your information: name, telephone number, e-mail address, mailing address, and last transaction amount. We will match this information to the information on our systems. For an online request to delete, we will also send you a second verification to confirm that you want your information to be deleted. In order to designate an authorized agent to act on your behalf you must provide the authorized agent with written permission to do so, and your authorized agent must submit that written proof at the time they make the

request on your behalf. If you wish to make multiple requests under this section, we recommend sending the deletion request last, as we will not be able to fulfill your other requests once we have deleted your information. We will maintain a record of your request to know or request to delete.

Do Not Sell My Personal Information

Personal Information that We Sell

We may "sell" (as sell is defined in CCPA) the following categories of personal information:

- Identifiers
- Characteristics of protected classifications under California and federal law;
- Internet/electronic activity;
- Commercial information; and
- Inferences drawn from the categories described above in order to create a profile about you to reflect your preferences, characteristics, preferences, behavior and attitudes.

We "sell" your personal information to Select Partners and to digital advertising networks. We do not knowingly sell the personal information of minors under the age of 16.

Right to Opt Out of Sale

California residents have the right to opt out of the sale of your personal information to third parties, as "sale" is defined under CCPA.

To submit a request to opt out of the sale of your personal information, please visit [Truyo Portal](#), or call 833.922.7529. In order to designate an authorized agent to act on your behalf you must provide the authorized agent with written permission to do so, and your authorized agent must submit that written proof at the time they make the request on your behalf.

We participate in digital advertising networks to deliver advertising that is tailored to your interests. The participation in certain ad networks can constitute a "sale" of personal information under CCPA. In order to opt out of this activity, please visit optout.aboutads.info and optout.networkadvertising.org.

Non-Discrimination

We will not discriminate against you for exercising any of your CCPA Rights and we will not deny you goods or services, charge you a different price, or provide you with a lesser quality of goods or services if you exercise any of your CCPA Rights.

Financial Incentives

We offer various financial incentives. The terms of the financial incentive will be presented to you at the time you sign up. You may withdraw from any of the financial incentives by contacting us at 800.541.1262, [email](#) or by unsubscribing to our email marketing by visiting our website. The value of your data is the value of the offer presented to you. We have calculated the value of the incentive by using the expense related to the offer.

Metrics:

Below are the metrics for the California consumer requests pursuant to CCPA that we received, complied with (in whole or in part) and denied between January 1, 2020 and December 31, 2020. Note that denied requests include requests that failed due to lapsed or failed verification or requests where an agent did not provide sufficient verification of their authority to make the request.

Requests to know:

Received: 146

Complied with in whole or in part: 109

Denied: 37

Median time to substantively respond: 41 days

Requests to delete:

Received: 100

Complied with in whole or in part: 60

Denied: 40

Median time to substantively respond: 36 days

Requests to opt-out:

Received: 6360

Complied with in whole or in part: 6360

Median time to substantively respond: 2 days

International Customer Privacy

For international shipping orders, Williams-Sonoma, Inc. Brands partner with Borderfree, Inc. ("Borderfree"). We have contracted with Borderfree to assure that they will carefully process your information consistent with this Privacy Policy.

When we identify that your order is one that will be shipped internationally, we work with Borderfree to complete your order. On the checkout page, you will be required to submit credit card and contact information (name, billing address, shipping address, email address and phone number) to Borderfree to complete your order. Upon completion of your order, Borderfree will notify us of the approval of your order, and we will then ship approved orders to Borderfree. Simultaneously, Borderfree will purchase the product from us, which allows them to take title to the product(s), bill your credit card, collect and remit any duties and

taxes to the appropriate taxing authority and arrange for the product to be delivered to you. In this process, Borderfree makes the sale to you as the merchant of record. When ordering a product, you will be presented with Borderfree's terms and conditions to which you must agree in order to receive the product(s) you ordered.

Once you place your order, you may see a pre-checked box indicating that you would like to receive information from Williams-Sonoma, Inc. Brands regarding offers and promotions that may be available from time to time. Unless the box is unchecked, Borderfree will share your information with Williams-Sonoma, Inc. Brands, and we will protect and use your information in accordance with this Privacy Policy.

If you choose to provide Williams-Sonoma, Inc. Brands with your information, you consent to the transfer and storage of that information on our servers located in the United States.

For international customers, any questions or concerns regarding the use or disclosure of your information should be directed to Williams-Sonoma, Inc. Brands by calling us at 405.717.6139 or sending us an email. We will investigate and attempt to resolve complaints and disputes regarding use and disclosure of your information in accordance with this Privacy Policy.

Security

We maintain physical, electronic, and procedural safeguards to protect the confidentiality and security of information transmitted to us. To guard your information delivered to us electronically, our web sites use Secure Sockets Layer (SSL). SSL encrypts your credit card number, name and address so only we are able to decode your information. Unfortunately, however, no data transmission over the Internet can be guaranteed to be 100% secure. As a result, while we strive to protect your contact information, to the extent permitted by law, we do not guarantee or warrant the security of any information you transmit to or from our web sites, and you do so at your own risk.

We urge you to keep any password that you establish with us in a safe place and not to divulge it to anyone. Also remember to log off your account and close your browser window when you have finished your visit. This is to ensure that others cannot access your account, especially if you are sharing a computer with someone else or are using a computer in a public place.

Protecting Children

We do not knowingly collect personal information from children under 13. If you are a parent or guardian and you are aware that any of your children has provided us with personal information without your consent, please contact us and we will take steps to remove that information from our servers.

Links to Third Party Web Sites

Our web sites may contain links to web sites operated and maintained by third parties, over which we have no control. Privacy policies on such linked web sites may be different from our privacy policy. You access such linked web sites at your own risk. You should always read the privacy policy of a linked web site before disclosing any of your information on such web site.

Policy Changes

If we decide to change our privacy policy in whole or in part, we will inform you by posting a notice on our web sites, as applicable. Those changes will go into effect on the effective date posted in the notice and at the end of the revised Privacy Policy. The new policy will apply to all current and past users of our web sites and will replace any prior policies that are inconsistent. Your continued use of our web sites or other services constitutes your acceptance of the practices described in the revised Privacy Policy.

Contact Us

In the U.S., you can call us at 800.541.1262 or send us an [email](#). Outside of the U.S., you can call us at 405.717.6139 or send us an [email](#).

EXHIBIT 56

2/18/2022 Rory McClelland Deposition Transcript Excerpts

**Redacted Version of
Document Sought to be Sealed**

CONFIDENTIAL

Page 1

IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF CALIFORNIA

- - - - - x

CHASOM BROWN; MARIA NGUYEN; WILLIAM
BYATT; JEREMY DAVIS; and CHRISTOPHER
CASTILLO, individually and on behalf
of all other similarly situated,

Plaintiffs,

No. 5:20-cv-03664-LHK

-against-

GOOGLE LLC,

Defendant.

- - - - - x

Zoom video conference deposition of
RORY McCLELLAND, taken pursuant to
notice, was held remotely, commencing
February 18, 2022, 5:30 a.m. Eastern
Standard Time, before Leslie Fagin, a
Stenographic Court Reporter and Notary
Public in the State of New York.

- - -

MAGNA LEGAL SERVICES
320 West 37th Street, 12th Floor
New York, New York 10018
(866) 624-6221

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A P P E A R A N C E S:

(All Parties Present Via Zoom.)

BOIES SCHILLER & FLEXNER LLP

Attorneys for Plaintiffs

44 Montgomery Street, 41st Floor

San Francisco, California 94104

BY: MARK MAO, ESQUIRE

ROSANNA BAEZA, ESQUIRE

QUINN EMANUEL URQUHART & SULLIVAN

Attorneys for Defendant

51 Madison Avenue, 22nd Floor

New York, New York 10010

BY: JOMAIRE A. CRAWFORD, ESQUIRE

CARL SPILLY, ESQUIRE

BAILEY GLASSER

Attorneys for Witness

209 Capitol Street

Charleston, West Virginia 25301

BY: BENJAMIN L. BAILEY, ESQUIRE

ELLIOTT MCGRAW, ESQUIRE

ALSO PRESENT:

LESLEY WEAVER, ESQUIRE

BLEICHMAR FONTI

For the Calhoun Plaintiffs

VANESSA WHEELER, Exhibit Tech

Magna Legal Services

1 R. McClelland

2 will see it says, We are currently not
3 addressing these user problems in any form.

4 Do you see that?

5 A. I do, yes.

6 Q. While you were employed by Google,
7 was that an accurate statement?

8 MS. CRAWFORD: Objection.

9 A. Show me again, in the main body of
10 the document, where that is referenced,
11 please.

12 Q. It's the paragraph that says, Users
13 meeting user expectations. If you look at
14 the first sentence, Research strongly
15 suggests, at the end of that sentence, there
16 is footnote 4 and --

17 A. I see it. Thank you. Repeat the
18 question one more time, please.

19 Q. Sure. When you were employed by
20 Google, was it an accurate statement that,
21 quote, We are currently not addressing these
22 user problems in any form, end quote.

23 MS. CRAWFORD: Objection, vague and
24 overbroad.

25 A. Yeah, looking at it now, there was

1 R. McClelland

2 some degrees of protection afforded through
3 the isolation. I think the sentence, if the
4 footnote is not fully precise, but there were
5 certainly improvements, there are things that
6 we could have done that would afforded users
7 more protection.

8 Q. What are examples of things you
9 could have done to afford users more
10 protections?

11 MS. CRAWFORD: Objection, calls for
12 speculation.

13 A. The proposal we put forward was to
14 allow the user to opt in to signaling Google
15 only web services of their Incognito intent,
16 so the web server -- Google could have a
17 privileged position of understanding that
18 intent and, therefore, could offer the user
19 this type of protection.

20 Q. Earlier you mentioned that there
21 were some degrees of protection afforded
22 through the isolation.

23 Do you recall that?

24 A. I do, yes.

25 Q. What did you mean by that phrase?

1 R. McClelland

2 A. Whilst the web server is oblivious
3 to the user's Incognito intent, because the
4 user, in an Incognito session, present to the
5 web server as an entirely new user, whilst it
6 is still logged and tracked, it is not
7 associated with any other browsing activity
8 that that user may have undertaken with the
9 same web server, whilst in regular mode, so
10 the tracking continues, but it is separated
11 from the tracking that occurs when they are
12 in their primary Chrome profile and that is
13 the segmentation I am referring to.

14 Q. If I understand, you are saying at
15 that time, tracking isn't connected to a
16 specific user profile?

17 A. Not quite technically correct. A
18 profile is created for that new user that is
19 different from their primary profile.

20 Q. Sorry, I didn't mean to interrupt.
21 Go ahead.

22 A. Those profiles are never joined, so
23 it just looks like another user in the web
24 server's eyes and every time the user comes
25 back in a new Incognito session, a new

1 R. McClelland

2 profile is created and, again, never joined,
3 so that separation occurs both from the
4 primary session, but also across different
5 distinct Incognito sessions.

6 Q. What kind of information is in a
7 primary profile?

8 MS. CRAWFORD: Objection, vague and
9 overbroad.

10 A. It's a very broad question. It
11 would depend upon the web server you are
12 referring to, each one is different, but the
13 general would be IP address, time and date
14 stamp, that kind of thing.

15 Q. You made a distinction between a
16 profile and a primary profile.

17 Do you recall that?

18 A. I do, yes.

19 Q. I'm trying to understand what kind
20 of information would be present in a primary
21 profile that is not present in a profile.

22 Can you help me understand the
23 difference between the two types of profiles
24 in terms of what information would be
25 contained in each?

1 R. McClelland

2 A. They are identical, the difference
3 would be that a primary profile is
4 persistent, it lives with the user over a
5 period of weeks, months, years and
6 accumulates more data with time.

7 The profile generated through an
8 Incognito session is transient, it is
9 created, it only captures data for the
10 duration of that particular Incognito
11 session. The data is persisted after that,
12 but nothing is ever added to it.

13 The next Incognito session would
14 start a whole new tracking profile.

15 Q. So data captured during Incognito
16 mode, that profile can be connected to a user
17 during the Incognito session?

18 MS. CRAWFORD: Objection, misstates
19 the witness' testimony.

20 A. Can you define what you mean by a
21 user in this instance?

22 Q. What do you understand user to
23 mean?

24 MS. CRAWFORD: Objection.

25 A. The -- it would be associated with

1 R. McClelland

2 facts.

3 Q. You can answer.

4 A. Yes, they would have used it
5 because they didn't know it was Incognito
6 sessions, as before, the web server is
7 oblivious to the user's Incognito intent by
8 design and as is standard across private
9 modes, so the tracking data captured by
10 Google when users visited Google web
11 properties in Incognito mode would have been
12 used in exactly the same manner as data that
13 had been captured in the user's regular mode,
14 albeit in isolation from their regular
15 profile.

16 Q. Can you give me examples of how the
17 user's data would have been used in exactly
18 the same matter as data having captured in
19 the user's regular mode?

20 MS. CRAWFORD: Objection.

21 A. I don't know specifically how the
22 data would be used, but I can talk to how it
23 wouldn't be used differently because...

24 Q. Sorry, Mr. McClelland, I wanted to
25 clarify something quickly before you answer.

1 R. McClelland

2 So I'm going to rephrase my
3 question again because I realize I left
4 something important out.

5 Can you give me examples of how
6 Incognito private browsing user data would
7 have been used in exactly the same manner as
8 data that was captured -- having been
9 captured in the user's regular mode?

10 MS. CRAWFORD: Objection as to user
11 in this context.

12 A. For example, a user who launched an
13 Incognito window who navigated to Google.com
14 and undertook a search, the Google.com web
15 service in this instance would create a new
16 cookie for that user, that user presenting as
17 a whole new user that has never been seen
18 before due to the nature of Incognito mode.

19 They are given a new cookie that
20 holds the unique identifier for that profile.
21 That cookie is held in memory on the user's
22 computer because it's in Incognito mode.

23 For the duration of that search,
24 session data is logged against the ID that
25 represents that profile on the server. When

1 R. McClelland

2 the user closes the last Incognito tab or
3 window, locally, that cookie is erased from
4 memory, but because on the server side, there
5 is no awareness that that was an Incognito
6 session.

7 That profile, with its
8 corresponding data will become -- best way of
9 explaining, orphaned, so it will continue to
10 exist, but it would never be supplemented
11 with any additional data.

12 Q. When you say, that data is logged
13 in the server, are you referring to Google's
14 servers?

15 A. I'm referring to any web server,
16 Google or otherwise.

17 Q. But it includes Google?

18 A. It does include Google, yes.

19 Q. When data is logged on Google
20 servers from Incognito private browsing
21 sessions, how does Google use that data?

22 MS. CRAWFORD: Objection, vague and
23 overbroad, calls for speculation.

24 A. I don't know. It's really outside
25 of my area of expertise at Google. I can't

1 R. McClelland

2 add a huge amount that any other layperson
3 could.

4 Q. What is your understanding of how
5 Google could use that data?

6 A. For example, they could build a
7 tracking profile for that limited amount of
8 data captured within the single Incognito
9 session, so that within that Incognito
10 session, the user begins to experience
11 personalized targeted advertising to be
12 clear, though that is only within a single
13 Incognito session, and with each new
14 Incognito session, that process starts
15 afresh.

16 Q. What kind of information could be
17 included in that tracking profile you
18 mentioned?

19 MS. CRAWFORD: Objection.

20 A. Again, outside of my area of
21 expertise really. The websites visited the
22 searches undertaken, the activities
23 undertaken within that website, again, Google
24 or otherwise.

25 Q. As far as you know, has Google ever

1 R. McClelland

2 their attention to it.

3 Q. If you could please scroll to the
4 page that ends in 455 and I'm looking
5 specifically at the [REDACTED] header.

6 Do you see where that appears?

7 A. Page 455?

8 Q. That's right. First page -- it's
9 at the very top of the page.

10 A. I see. Yes, I skipped over it.

11 Q. If we could call that up on the
12 screen.

13 Do you mind rereading this sentence
14 and letting me know when you are done?

15 A. I have read it.

16 Q. Based on your understanding of this
17 portion of the document, do you understand
18 that Google prohibits reidentifying any
19 individuals using anonymous or synonymous
20 data?

21 A. I do, but that doesn't seem to
22 apply to the particular bit of tech shown,
23 but, yes, I do.

24 Q. If we get to a portion of the
25 document where there is support for that

1 R. McClelland

2 understanding, can you just call it out and
3 let me know?

4 A. Sure.

5 Q. Google prohibits, based on your
6 understanding of this policy, correlating
7 authenticated and non-authenticated
8 information, is that right?

9 A. That is right, yes.

10 Q. Can you explain why that is?

11 A. An example would be in Incognito
12 mode, again, a user who signed in in regular
13 mode, one use of Incognito may be to
14 temporarily present as a non-signed-in user
15 and, therefore, it's important, from the
16 user's point of view, they have chosen to do
17 that to segment their browsing activity and,
18 therefore, it is important that Google does
19 not attempt to rejoin that data.

20 Q. Are you aware of Google rejoining
21 that data?

22 A. No, as far as I am aware, Google
23 never did that.

24 Q. Why is that?

25 A. Because it would be a breach of

1 R. McClelland

2 user trust, potential PR incident.

3 Q. Google also prohibits
4 fingerprinting users for the purpose of
5 associating their activity over time or
6 across contexts, is that right?

7 MS. BAEZA: Objection to form, lack
8 of foundation, compound.

9 A. Yes, that is my understanding, that
10 fingerprinting was also not allowed to be
11 used.

12 Q. Is your understanding of why it was
13 not allowed to be used any different than the
14 explanation you just provided for why Google
15 doesn't correlate authenticated and
16 non-authenticated data?

17 A. Exactly, same reasons, user trust
18 perception, PR.

19 Q. In the context of Incognito mode
20 for Chrome specifically, is it also true that
21 Google prohibits joining authenticated
22 information with non-authenticated data?

23 A. Exactly, the policy still applies
24 for Incognito mode.

25 Q. If a user opens an Incognito window

1 R. McClelland

2 and does not log into a Google account, the
3 information from their Incognito browsing
4 session would be considered unauthenticated,
5 is that right?

6 A. Not necessarily a user. There is
7 nothing to prevent a user from signing into
8 to a regular account within Incognito mode,
9 upon which they would then be authenticated,
10 but, by default, when you first launch an
11 Incognito window, you would be signed out of
12 all Google services and, therefore,
13 unauthenticated.

14 Q. If the user in that Incognito
15 session does not log in at all to any Google
16 account, is the information from that
17 browsing session unauthenticated?

18 A. That is right, it's
19 unauthenticated.

20 Q. And Google team members, would you
21 agree, are tasked with preventing the joining
22 of data from non-Incognito browsing instances
23 with Incognito browsing instances?

24 A. Tasked with preventing, my
25 understanding more that it was prohibited, it

1 R. McClelland
2 wasn't allowed. Whether there were efforts
3 to actually make that harder, I don't know or
4 not, but my understanding of the policy was
5 that as employees, we must never do that,
6 must never endeavor to do that.

7 Q. Are you aware of any instance where
8 you endeavored to do that or anyone who
9 reported to you?

10 A. No.

11 MS. BAEZA: Objection to form,
12 compound, asked and answered.

13 A. No, I am not aware of any incident
14 where that was tried.

15 Q. Were you, in connection with your
16 work as Chrome browser privacy manager,
17 responsible for enforcing this policy?

18 A. No, that was outside of my
19 responsibilities. There were teams who were
20 more responsible for it, but everyone had a
21 responsibility to adhere to the policy.

22 Q. Would you say you did that in
23 connection with your employment at Google?

24 A. Yes, that's right.

25 Q. I would now like to introduce tab

1 R. McClelland

2 7, which is another document that Google's
3 produced during the course of discovery. It
4 bears the Bates stamp GOOG-CABR-05236676. I
5 believe that's going to load on the screen as
6 T-07.

7 If you could please have a look at
8 that document once it's ready and available
9 to you.

10 A. I'm reviewing it now.

11 (Exhibit 24, documents beginning
12 with Bates stamp No. GOOG-CABR-05236676,
13 marked for identification.)

14 A. Okay. I have read the document.
15 Thank you.

16 Q. Starting at the very top of the
17 document, this is an email from Yuval Desheh
18 to you and others, is that correct?

19 A. That is right.

20 Q. I could be mispronouncing the last
21 name, so feel free to correct me if
22 necessary.

23 Did you receive this email in
24 connection with your work for Google?

25 A. I did.

1 R. McClelland

2 Incognito works, the session data is shared,
3 meaning, that tracking could occur within
4 that session and if a user had forgotten that
5 they had an existing Incognito window open
6 and clicked on this new link, a new Incognito
7 window would open and we felt there wasn't
8 sufficient transparency for the user and we
9 needed to find a mechanism to warn them that
10 they had an existing window open.

11 Q. Is that something you looked into
12 and worked on during your time at Google?

13 A. Yes, that is right.

14 Q. Can you explain what work was done
15 to address this issue?

16 A. We, if I remember correctly, we
17 would detect the situation and prompt the
18 user, asking them what to do, although I
19 think this was work in progress around the
20 time I left, as well. I don't know how the
21 end -- the feature results was ultimately
22 delivered.

23 Q. Why would it have been important
24 for you to -- for Google to offer that
25 feature to users?

1 R. McClelland

2 A. To make sure that the user did not
3 unintentionally reveal data to a third party
4 website that they had not intended to do so.

5 Q. And Google, based on your
6 experience, also aimed to prevent the
7 accident joining of Incognito mode browsing
8 information with non-Incognito mode browsing
9 information, right?

10 A. That is right.

11 Q. I think you just testified to that
12 a moment ago, is that right, as well?

13 A. That is also correct.

14 Q. Let me take a step back and
15 follow-up on a word that you used in your
16 answer just now to make sure that the record
17 is clear as to the context.

18 I think you used the word tracking
19 in connection with the -- in connection with
20 user data and I want to make sure that I
21 understand, when you are using the word
22 tracking, generally, are you referring to
23 something nefarious or something that's
24 commonplace or commonly understood, either as
25 a technical matter or otherwise?

1 R. McClelland

2 A. It's a more commonly used phrase,
3 tracking of user behavior. It's often used
4 in a way that is intended to be nefarious,
5 but it's also a more commonly applied
6 technique that is not necessarily nefarious.
7 Sort of a complex answer. But, generally,
8 no, it's a broader concept of being able to
9 track a user and profile a user for various
10 purposes.

11 Q. So I assume when you've used the
12 word tracking in your testimony today, is it
13 fair to assume that the connotation is one
14 other than the nefarious association that you
15 just mentioned?

16 A. It's intended to be used neutrally,
17 but the important point is that in certain
18 circumstances, it is undesired tracking on
19 the users' behalf and the ability for the
20 user to control that tracking is what we are
21 normally referring to.

22 Q. Are you aware -- before I get
23 there, in your communications with
24 plaintiffs' counsel proceeding the scheduling
25 of your deposition, did they provide you with

1 R. McClelland

2 A. I'm looking at it now.

3 MS. CRAWFORD: I don't see it on
4 the screen here, but would it be
5 possible for someone to put that up so
6 that I can have a look, as well.

7 Q. Please take a moment to familiarize
8 yourself with this excerpt from the 75-page
9 complaint that plaintiffs in this case have
10 filed against Google and let me know when you
11 are done.

12 (Exhibit 25, excerpt from 75-page
13 complaint, marked for identification.)

14 A. Okay. I have read it. Thank you
15 for your patience.

16 Q. Absolutely.

17 Did you see in paragraph 93, which
18 starts on page 30 of 75 and continues on to
19 page 31 of 75, where it is alleged that
20 Google has, quote, gained a complete cradle
21 to grave profile of users, closed quote?

22 A. I see it, yes.

23 Q. Then it goes on to explain, in sub
24 letters A through E, the alleged ways in
25 which that cradle to grave profile exists.

1 R. McClelland

2 Do you see those explanations, as
3 well?

4 A. I do, yes.

5 Q. Based on your work as product lead
6 for Chrome browser privacy, are these
7 allegations accurate, Mr. McClelland?

8 A. I will address them one by one
9 perhaps.

10 Q. Specifically the allegation that
11 Google creates a cradle to grave profile that
12 creates logout private browsing data with
13 non-private browsing data?

14 A. My understanding and my experience
15 at Google would indicate that that is not the
16 case.

17 From memory, tracking data after 18
18 months is discarded, it's no longer useful,
19 so the longest profile is based upon 18
20 months' worth of data. Signed-in data is
21 never -- there is no attempt to link signed
22 in -- authenticate user data with non-signed
23 in data and certainly Incognito sessions were
24 not joined with regular sessions.

25 Q. Do you have any other reactions in

1 R. McClelland

2 reading these allegations as to the ways in
3 which this framing is inconsistent with your
4 work at Google or your understanding of how
5 private browsing mode for Chrome worked?

6 MS. BAEZA: Objection to form,
7 mischaracterizes testimony, compound.

8 Q. You can answer.

9 A. It tends to assume a short-term
10 revenue interest at the expense of long-term
11 sustainability of the web ecosystem. I don't
12 feel that it is Google's desire for long-term
13 sustainability is accurately reflected in
14 these statements.

15 Q. And what is your view of Google's
16 desire -- what do you understand Google's
17 desire for long-term sustainability to be,
18 based on your role as product lead for Chrome
19 browser privacy?

20 A. Google's desire is to have a web
21 ecosystem that continues to thrive, continues
22 to grow and continues to be the preferred
23 place for people to access content and to use
24 web functionality and for developers to be
25 the preferred platform to launch

1 R. McClelland

2 Google does not associate the data collected
3 from Incognito mode browsing sessions with
4 any preexisting Google, quote, profiles,
5 closed quote, is that correct?

6 A. That is correct. The wording here
7 is interesting. Google is able to do it, but
8 Google does not, is my understanding.

9 Q. And when you say, the wording is
10 interesting, is it for a reason other than
11 the one you just explained, and, if so, can
12 you explain what you mean by the wording is
13 interesting?

14 A. Technically, it would be possible
15 if Google wanted to, to join these sessions,
16 but policy prohibits it and I never saw
17 anything that indicated to me, during my time
18 there, that that was happening.

19 Q. When a user begins an Incognito
20 browsing session, I think you testified
21 already that a new or fresh profile is
22 created?

23 A. If the user were to visit a Google
24 property, then, yes, a new tracking profile
25 would be created for a browsing activity on

1 R. McClelland
2 third party websites, then nothing would be
3 created on Google servers.

4 Q. The word, profile, appears in
5 quotes within this paragraph of their
6 complaint, so I want to make sure I
7 understand how you might be using the word,
8 profile, in connection with your work.

9 As with the word, tracking, is the
10 word, profile, when used internally at
11 Google, does it carry a negative connotation
12 or nefarious connotation?

13 A. No, it simply refers to a persona,
14 a user.

15 Q. And any data from the Incognito
16 browsing session that is sent to Google, is
17 it accurate to say that it is, in fact, not
18 associated with a users' non-Incognito mode
19 profile?

20 A. That is correct, it is not
21 associated with their primary profile.

22 Q. Therefore, data from an Incognito
23 mode browsing session would not be used to
24 serve ads after the Incognito window is
25 closed, is that right, and, therefore, when

1 R. McClelland

2 the cookie jar is sort of refreshed or
3 depleted?

4 A. That is correct.

5 MS. BAEZA: Objection, form, vague,
6 compound.

7 Go ahead.

8 A. Yes, that is correct. There may be
9 a small degree of targeted advertising
10 experienced within a single Incognito
11 session, but at the end of that session, when
12 the last tab or window is closed and the
13 local cookie jar is deleted, then none of
14 that would then be pushed into the primary
15 profile.

16 Q. If we can, last question about this
17 exhibit. I'm going to focus our attention on
18 paragraphs 94 and 95 on the next page.

19 MS. CRAWFORD: If we could please
20 call those up on the screen.

21 Q. Do you see here where paragraph 94
22 says, quote, Another powerful tool Google
23 uses in building detailed profiles of what
24 may some day be every individual on the
25 planet, is the X-Client Data Header, closed

1 R. McClelland

2 quote.

3 Do you see that?

4 A. I do, yes.

5 Q. Do you see in the next paragraph
6 where plaintiffs have alleged, quote,
7 Google's Chrome browser identifies every
8 device upon the first installation of Chrome
9 with a unique digital string of characters
10 called Google's, quote, X-Client Data Header,
11 closed quote, such that Google uniquely
12 identifies the device and user thereafter.
13 Whenever Chrome is used, the Google browser
14 is constantly transmitting this X-Client Data
15 Header to Google servers, developer tools
16 confirm this as follows, closed quote.

17 Did I read that correctly?

18 MS. BAEZA: Objection, form,
19 mischaracterizes the document.

20 A. Yes, I believe you did.

21 Q. I believe you were asked a couple
22 of questions about the X-Client Data Header
23 during Ms. Baeza's examination.

24 Do you recall the testimony that
25 you gave on that issue?

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1
2
3
4 CERTIFICATE5 I HEREBY CERTIFY that the foregoing proceedings
6 were duly sworn by me and that the proceedings are a
7 true record.8
9 
10 Leslie Fagin,
11 Registered Professional Reporter
12 Dated:
1314 (The foregoing certification of this transcript
15 does not apply to any reproduction of the same by any
16 means, unless under the direct control and/or
17 supervision of the certifying reporter.)
18
19
20
21
22
23
24
25

EXHIBIT 57

**3/10/22 Stephen
Chung 30(b)(6)
Deposition
Transcript Excerpts**

**Redacted Version of
Document Sought to
be Sealed**

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UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA

CHASOM BROWN, WILLIAM BYATT,
JEREMY DAVIS, CHRISTOPHER
CASTILLO, and MONIQUE
TRUJILLO, individually and on
behalf of all other similarly
situated,

Plaintiffs,

vs.

Case No.

GOOGLE LLC,

5:20-cv-03664-LHK-SVK

Defendant.

_____ /

-- CONFIDENTIAL --

VIDEOTAPED FEDERAL RULE 30(B)(6) DEPOSITION

OF GOOGLE LLC, BY STEPHEN CHUNG

Remote Zoom Proceedings

Los Angeles, California

Thursday, March 10, 2022

REPORTED BY:

LESLIE ROCKWOOD ROSAS, RPR, CSR 3462

Job No. 5126135

Pages 1 - 183

Page 1

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA

CHASOM BROWN, WILLIAM BYATT,
JEREMY DAVIS, CHRISTOPHER
CASTILLO, and MONIQUE
TRUJILLO, individually and on
behalf of all other similarly
situated,

Plaintiffs,

vs.

Case No.

GOOGLE LLC,

5:20-cv-03664-LHK-SVK

Defendant.

_____ /

-- CONFIDENTIAL --

Videotaped Federal Rule 30(b)(6) deposition of
GOOGLE LLC, by STEPHEN CHUNG, taken on behalf of the
Plaintiffs, Remote Zoom Proceedings from Los Angeles,
California, beginning at 8:31 a.m. Pacific Standard Time
and ending at 3:48 p.m. Pacific Standard Time, on
Thursday, March 10, 2022, before Leslie Rockwood Rosas,
RPR, Certified Shorthand Reporter No. 3462.

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1 APPEARANCES :

2
3 FOR THE PLAINTIFFS :

4 BOIES SCHILLER FLEXNER LLP

5 BY: HSIAO (MARK) C. MAO, ESQ.

6 ERIKA NYBORG-BURCH, ESQ.

7 44 Montgomery Street, 41st Floor

8 San Francisco, California 91401

9 (415) 293-6800

10 mmao@bsfllp.com

11 enyobrg-burch@bsfllp.com

12 -and-

13 MORGAN & MORGAN

14 BY: RYAN MCGEE, ESQ.

15 201 North Franklin Street, 7th Floor

16 Tampa, Florida 33602

17 (813) 223-5505

18 rmcgee@forthepeople.com

19 -and-

20 SUSMAN GODFREY LLP

21 BY: ALEXANDER P. FRAWLEY, ESQ.

22 3201 Avenue of the Americas, 32nd Floor

23 New York, New York 10019

24 (212) 729-2044

25 afrawley@susmangodfrey.com

Page 3

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1 APPEARANCES (Continued):

2
3 FOR THE DEFENDANT:

4 QUINN EMANUEL URQUHART & SULLIVAN, LLP

5 BY: BRETT N. WATKINS, ESQ.

6 Pennzoil Place

7 711 Louisiana Street, Suite 500

8 Houston, Texas 77002

9 (713) 221-7030

10 brettwatkins@quinn emanuel.com

11 -and-

12 BY: ALYSSA (ALY) G. OLSON, ESQ.

13 865 South Figueroa Street, 10th Floor

14 Los Angeles, California 90017

15 (213) 443-3000

16 alyolson@quinnemanuel.com

17
18 Also Present:

19 Sean Grant, Videographer

20 Justin Cohen, Google Inhouse Counsel

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I N D E X

THURSDAY, MARCH 10, 2022

WITNESS

EXAMINATION

STEPHEN CHUNG

BY MR. MAO

11, 174

BY MR. WATKINS

170

QUESTIONS WITNESS INSTRUCTED NOT TO ANSWER:

(NONE)

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1 Q. Got it.

2 Would you mind going down to the next page on 55
3 and taking a look at that. Because I have a question, a
4 followup question on what you just said right there.

5 A. Okay. 08:55:11

6 Q. All right. So Mr. Chung, my main question is:
7 When does [REDACTED] send something to [REDACTED] or display a [REDACTED] on
8 this page?

9 In other words --

10 MR. WATKINS: Objection -- 08:55:24

11 Q. BY MR. MAO: -- you know, this process you're
12 talking about; right? Like as it's collecting -- you
13 know, when the traffic comes into doubleclick.net,
14 when -- when does it actually then route it to [REDACTED]? Is
15 that like something that always happens? Is it something 08:55:39
16 that's conditional depending on something, like you said,
17 like, you know, like you have to implement ads? Like do
18 you know?

19 MR. WATKINS: Objection. Vague and assumes
20 facts not in evidence. 08:55:59

21 THE WITNESS: I don't know the answer to this
22 question.

23 Q. BY MR. MAO: How does -- how does [REDACTED] serve
24 [REDACTED] for this process described here at page 55?

25 MR. WATKINS: Objection. Vague, assumes facts 08:56:13

Page 25

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1 not in evidence.

2 THE WITNESS: I don't know the answer to this
3 question. I don't know what display [REDACTED] is in this slide
4 and diagram.

5 Q. BY MR. MAO: Have you ever worked with [REDACTED]? 08:56:25

6 A. I don't know what [REDACTED] stands for.

7 Q. It's -- I believe it stands for [REDACTED]
8 [REDACTED].

9 A. I have never worked on [REDACTED].

10 Q. Got it. 08:56:42

11 Going back to pages 53 and 54, does a data flow
12 here, either of these pages, depend on or vary dependent
13 on whether a user is in private browsing mode or not on
14 their browser?

15 A. With respect to data collection for the purpose 08:57:14
16 of the Analytics product, there is no distinguishing
17 between data coming from an Incognito browser or a normal
18 browsing browser.

19 Q. Got it.

20 Sticking on page 54 for a moment, what is a 08:57:30
21 "WPID" on the right there; do you know what that is?
22 That's a genuine question for myself as well. I'm trying
23 to understand what that is.

24 A. I do not know what a WPID is.

25 Q. Could it be like website publisher ID or you 08:57:50

Page 26

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1 just don't know?

2 A. I honestly don't know.

3 Q. Do you see how it's actually color coded there
4 on the right? Do you know why it's color coded?

5 MR. WATKINS: Objection. Vague. 08:58:15

6 THE WITNESS: I don't. I don't know the -- what
7 the color code in this slide represents.

8 Q. BY MR. MAO: Got it.

9 In your near two-year tenure with Google, have
10 you ever worked with [REDACTED] or a 08:58:31
11 display [REDACTED]?

12 A. I have not.

13 MR. MAO: Thank you. All right.

14 I'm introducing as an exhibit, Exhibit Number 3.

15 (Exhibit 3, How Google Analytics Uses Cookies To 08:58:44

16 Identify Users, 12/23/19, GOOG-CABR-05876977 -

17 986, was marked for identification by counsel

18 electronically.)

19 Q. BY MR. MAO: Give me a second here. It should
20 populate. Once it populates, it should be a document 08:58:52
21 entitled "How Google Analytics Uses Cookies to Identify
22 Users."

23 A. I have it open now.

24 Q. Yeah, I don't know if you've ever seen an
25 implementation documentation like this, if you just look 08:59:39

Page 27

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1 differentiate between a private browser versus a normal
2 browser. So the way we receive, process, collect data is
3 all the same.

4 MR. MAO: Thank you.

5 Next exhibit. You could put away that 14:37:05
6 monstrosity.

7 (Exhibit 23, Email string from Florian Uunk to
8 Chris Liao and others, 05/12/20,
9 GOOG-BRWN-00386192 - 193, was marked for
10 identification by counsel electronically.) 14:37:17

11 MR. MAO: I'm introducing as exhibit, Exhibit
12 Number 23.

13 THE WITNESS: I have it open.

14 MR. WATKINS: I have a standing objection.
15 Outside the scope of the designated topics for questions 14:37:48
16 on this exhibit.

17 Q. BY MR. MAO: Yeah, my question is actually
18 relatively discrete. And I'm actually asking you if you
19 look at the bottom of -- sorry, I'm just literally having
20 trouble finding the statement here. Ah, second page, 14:38:23
21 which is 163.

22 Do you see that there is a statement there from
23 Mr. Chris Liao: "Incognito is detectable with JavaScript
24 so if you are able to doing logging client-side, you
25 should be able to get more precise metrics." 14:38:46

Page 140

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1 I'm not asking you anything precisely with
2 regard to that statement. My question is: At least with
3 regard to the collection of data triggered by Google
4 Analytics JavaScript, I think you and I agree that
5 generally that does not differentiate between private 14:39:06
6 browsing versus non-private browsing.

7 That's correct; right?

8 A. That is correct. Or Google Analytics. There is
9 no difference in how data is collected from a private
10 browser versus normal browser. 14:39:22

11 Q. Right. So sitting here today -- and this is me
12 kind of starting to move away from the documents
13 generally; right? I was introducing this exhibit more as
14 a point. You may get rid of that for now.

15 My question is: What are the different ways in 14:39:36
16 which a user, let's say using Chrome, Chrome Incognito,
17 how would they use Chrome Incognito to prevent Google
18 Analytics from logging their activity? I'm talking about
19 logging altogether.

20 MR. WATKINS: Objection. Vague, outside of the 14:40:04
21 scope topics for which he's designated.

22 THE WITNESS: To clarify, are you -- are you
23 asking as an end user on a website using a Chrome
24 browser, how can that end user use the browser in a way
25 that like Analytics does not collect any information 14:40:28

Page 141

1 about them?

2 Q. BY MR. MAO: Yeah, actually in Incognito. I'm
3 talking specifically Incognito.

4 A. Incognito.

5 MR. MAO: And Mr. Watkins, I believe that he is 14:40:41
6 designated for this topic.

7 MR. WATKINS: For which topic?

8 MR. MAO: This topic I'm asking him about. Look
9 at Notice 2, Topic 3. That's what he's designated for.
10 The same with Notice 2, Topic 4, Notice 2, Topic 5. 14:41:00

11 MR. WATKINS: Yeah, I agree as to Topic 3, but
12 not Topic 4 and 5.

13 But you can go ahead and answer to the extent
14 you can, Mr. Chung.

15 MR. MAO: All I need, Brett, is one. 14:41:17

16 Q. Mr. Chung, can you respond to my question: How
17 would a user using Chrome Incognito prevent Google
18 Analytics scripts from collecting their browsing
19 activity?

20 A. My understanding, with my understanding today of 14:41:37
21 the Chrome Incognito browser, there -- it does not offer
22 an ability to -- for an end user to block first-party
23 cookies today.

24 And so my understanding I would lead me to
25 believe that an end user cannot take proactive action 14:41:54

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1 STATE OF CALIFORNIA) ss:

2 COUNTY OF MARIN)

3
4 I, LESLIE ROCKWOOD ROSAS, RPR, CSR NO. 3462, do
5 hereby certify:

6 That the foregoing deposition testimony was
7 taken before me at the time and place therein set forth
8 and at which time the witness was administered the oath;

9 That testimony of the witness and all objections
10 made by counsel at the time of the examination were
11 recorded stenographically by me, and were thereafter
12 transcribed under my direction and supervision, and that
13 the foregoing pages contain a full, true and accurate
14 record of all proceedings and testimony to the best of my
15 skill and ability.

16 I further certify that I am neither counsel for
17 any party to said action, nor am I related to any party
18 to said action, nor am I in any way interested in the
19 outcome thereof.

20 IN WITNESS WHEREOF, I have subscribed my name
21 this 15th day of March, 2022.

22
23 
24

25 LESLIE ROCKWOOD ROSAS, RPR, CSR NO. 3462

Page 179

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1 I declare under the penalty of perjury under the
2 laws of the State of California that the foregoing is
3 true and correct.

4 Executed on _____, 2022, at

5 _____, _____.

DocuSigned by:

Stephen Chung

0C906716DAE6462...

STEPHEN CHUNG

EXHIBIT 58

7/15/22 Mark Keegan Deposition Transcript Excerpts

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA

CHASOM BROWN, WILLIAM BYATT,) Case No.
JEREMY DAVIS, CHRISTOPHER) 5:20-cv-03664-LHK-
CASTILLO, and MONIQUE TRUJILLO) SVK
individually and on behalf of)
all other similarly situated,)
)
Plaintiffs,)
)
vs.)
)
GOOGLE LLC,)
)
Defendant.)
_____)

VIRTUAL VIDEOCONFERENCE VIDEO-RECORDED
DEPOSITION OF MARK KEEGAN

Friday, July 15, 2022
Remotely Testifying from Rye, New York

Stenographically Reported By:
Hanna Kim, CLR, CSR No. 13083
Job No. 5302317

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA

CHASOM BROWN, WILLIAM BYATT,) Case No.
JEREMY DAVIS, CHRISTOPHER) 5:20-cv-03664-LHK-
CASTILLO, and MONIQUE TRUJILLO) SVK
individually and on behalf of)
all other similarly situated,)
)
Plaintiffs,)
)
vs.)
)
GOOGLE LLC,)
)
Defendant.)
_____)

Virtual videoconference video-recorded
deposition of MARK KEEGAN, remotely
testifying from Rye, New York, taken on
behalf of the Defendant, on Friday,
July 15, 2022, before Hanna Kim, CLR,
Certified Shorthand Reporter, No. 13083.

REMOTE VIDEOCONFERENCE APPEARANCES OF COUNSEL:

For Plaintiffs:

BOIES SCHILLER FLEXNER LLP

BY: JAMES LEE, ESQ.

BY: MARK C. MAO, ESQ.

BY: BEKO O. REBLITZ-RICHARDSON, ESQ.

100 SE 2nd St., 28th Floor

Miami, Florida 33131

305.539.8400

jlee@bsfllp.com

For Defendant:

QUINN EMANUEL URQUHART & SULLIVAN, LLP

BY: ALYSSA "ALY" OLSON, ESQ.

BY: STEPHEN BROOME, ESQ.

865 S. Figueroa Street, 10th Floor

Los Angeles, California 90017

213.443.3000

alyolson@quinnemanuel.com

1 REMOTE APPEARANCES OF COUNSEL: (CONTINUED)

2
3 Also Present:

4 AN TRUONG, ESQ, Simmons Hanly Conroy
5 (For Plaintiffs in Calhoun v. Google)

6 LAURA O'LAUGHLIN, Analysis Group

7 ANUSHKA SIKDAR, Boies Schiller Flexner

8 ROBERT FENTON, Video Operator
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Page 4

INDEX OF EXAMINATION

WITNESS: MARK KEEGAN

EXAMINATION	PAGE
-------------	------

BY MS. OLSON:	10, 243
---------------	---------

BY MR. LEE:	241
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1 informs their opinion about the -- the issue
2 measured in my survey, then it is reflected in the
3 survey results.

4 BY MS. OLSON:

5 Q. But because it wasn't shown as a stimuli, 18:46:33
6 you don't know for any given respondent which
7 documents may have informed their understanding;
8 right?

9 A. What I know about each respondent is
10 exposure that they had in the survey and that 18:46:59
11 they're bringing their, you know, life experience to
12 the survey. So that's -- that's what I know.

13 Q. You didn't test respondents' understanding
14 of the Google privacy policy; right?

15 MR. LEE: Objection to form. 18:47:24
16 Mischaracterizes Mr. Keegan's report and his survey.

17 THE WITNESS: I tested the degree to which
18 consumers were -- were misinformed about the --
19 Google's data collection policy. To the extent that
20 they, in their experience as a private browsing mode 18:47:57
21 user, had exposure to Google's privacy policy, then
22 that would be reflected in my survey.

23 BY MS. OLSON:

24 Q. But your survey does not tell us if
25 respondents were misinformed because they read the 18:48:19

1 privacy policy -- or based on Google's privacy
2 policy; right?

3 MR. LEE: Asked and answered.

4 Mischaracterizes the survey.

5 THE WITNESS: I believe that -- that my 18:48:34
6 survey tells us that to the extent that Google's
7 privacy policy, in particular, is informing private
8 browsing mode users as a group, that to the extent
9 it's effective in doing that, that that -- that
10 awareness is reflected in the survey results. 18:49:05

11 BY MS. OLSON:

12 Q. Are you opining that Google's privacy
13 policy is informing private browsing mode users as a
14 group?

15 A. I am not. 18:49:18

16 Q. You didn't ask any of the respondents
17 whether or not they had reviewed the privacy policy
18 at any point in time; correct?

19 MR. LEE: Asked and answered.

20 THE WITNESS: That's correct. I allowed 18:49:44
21 users to bring their real-life experience to the
22 survey.

23 BY MS. OLSON:

24 Q. And you don't know if a single respondent
25 in your survey ever reviewed the Chrome privacy 18:49:54

1 notice; correct?

2 A. That is correct. Again, to the extent
3 that's something that consumers who were private
4 browsing mode users, to the extent that is something
5 that is -- something they review and -- and -- and 18:50:13
6 that it impacts them in some way, that it's
7 informational, then that -- that information, that
8 awareness is reflected in the survey that I
9 conducted.

10 Q. But you don't actually know if any 18:50:34
11 respondent had that awareness?

12 A. What --

13 MR. LEE: Objection to form. Asked and
14 answered for I think the fifth time.

15 THE WITNESS: I'm sorry, I don't know what 18:50:49
16 you mean by "that awareness."

17 BY MS. OLSON:

18 Q. Sure.

19 So you testified that to the extent that
20 users who were pri- -- in private browsing mode -- 18:50:58
21 you said, sorry, "to the extent something that they
22 review and impacts them in a way that it's
23 informational, then that information, that awareness
24 is reflected in the survey I conducted."

25 And my question was, but you don't 18:51:14

1 actually know, if any, respondent had that
2 awareness?

3 A. And I said --

4 MR. LEE: Asked and answered.

5 THE WITNESS: And I asked what you mean by 18:51:26
6 "that awareness."

7 BY MS. OLSON:

8 Q. I was referring to the awareness you
9 mentioned in your prior answer.

10 MR. LEE: Can you just rephrase your 18:51:36
11 question, please.

12 MS. OLSON: Sure.

13 BY MS. OLSON:

14 Q. You said -- so, right.

15 So you said, "To the extent that something 18:51:49
16 that consumers who were private browsing mode users,
17 to the extent that is something they review and it
18 impacts them in some way, that it's informational,
19 then that information, that awareness is reflected
20 in the survey that I conducted." 18:52:11

21 And my question was, as you use the
22 phrase "that awareness" in your answer, you don't
23 actually know if any respondent had that awareness?

24 A. I don't know why --

25 MR. LEE: Objection. 18:52:29

1 sphere.

2 Q. And later in the paragraph, you say
3 that -- that you "did not know that Google receives
4 and saves from my private browsing mode activities,
5 including in particular when I am visiting 19:59:23
6 non-Google websites without being signed in to any
7 Google account. This was something I first learned
8 when I became engaged as an expert for this
9 litigation." [As read]

10 What exactly was it that you learned that 19:59:36
11 you did not know before after you were engaged in
12 this litigation?

13 MR. LEE: Document speaks for itself.

14 THE WITNESS: Well, I learned that there
15 is a immense amount of data collection that's going 19:59:51
16 on at the user level when you're in Incognito. So
17 that's -- that's what I learned. That was a --
18 quite a surprise to me personally.

19 BY MS. OLSON:

20 Q. Were you offended by it? 20:00:17

21 A. Offended? I --

22 MR. LEE: Beyond the scope.

23 THE WITNESS: Yeah, I -- I wouldn't use
24 the word "offended." I was surprised. I -- I felt
25 a little naive. 20:00:38

Page 223

1 BY MS. OLSON:

2 Q. And so, you wouldn't want to facilitate
3 Google's receipt of this data from private browsing
4 mode users; is that correct -- or is that accurate?

5 MR. LEE: Wait, what? Say that again. 20:00:57

6 BY MS. OLSON:

7 Q. Is it accurate that you wouldn't want to
8 facilitate Google's receipt of this data from
9 private browsing mode users?

10 A. Yes. That's -- that I -- of -- of -- of 20:01:09
11 me or of other users?

12 MR. LEE: Yeah, let me object to the --
13 beyond the scope of his expert opinion. If
14 Ms. Olson wants to ask you about your personal
15 beliefs for the next 20 minutes, it's fine, but I'd 20:01:29
16 ask for a running objection on beyond the scope.

17 BY MS. OLSON:

18 Q. The question was, is it accurate that you
19 wouldn't want to facilitate Google's receipt of data
20 from other private browsing mode users? 20:01:44

21 A. Correct. Yes. I -- I would not want to
22 be a party to that.

23 Q. Does your website currently use Google
24 Analytics?

25 A. I -- I think it does, but I'm not the 20:01:57

1 person that deals with that.

2 Q. Does your website currently use Google Tab
3 Manager?

4 MR. LEE: Beyond the scope.

5 THE WITNESS: I don't know what that is. 20:02:19

6 BY MS. OLSON:

7 Q. Are you aware if those services -- well,
8 I'll just stick with Google Analytics since you said
9 you didn't know what Google Tab Manager was.

10 Are you aware if the Google Analytics 20:02:39
11 services on your websites continues [verbatim] to
12 function whether or not users are in Incognito mode?

13 MR. LEE: Beyond the scope.

14 THE WITNESS: As I sit here, to the extent
15 that we have Google Analytics, and I think we do. 20:02:52
16 So yes, I hadn't thought about this until you just
17 asked this question. But, yes, it -- it does appear
18 that I am now a party to this, that people who come
19 to our website because if we're using analytics,
20 that -- that from what I've learned in this case, 20:03:20
21 that Google is, you know, tracking them, if -- if
22 they're in private browsing mode and -- and
23 collecting data and doing -- doing -- doing what
24 they do.

25 So this is one of those, you know, gun to 20:03:34

1 your head situations that we were discussing
2 earlier. Not thrilled about that. But analytics is
3 an important tool for a small company like mine and
4 for a big company like somebody else's, which is why
5 it's as successful as it is. 20:03:55

6 So will my disappointment in -- in
7 participating in this behavior, which I now know
8 very clearly users do not expect to happen, I don't
9 love it, but you don't see myself removing analytics
10 from my website. 20:04:19

11 BY MS. OLSON:

12 Q. Okay. Let's turn to the next paragraph,
13 26.

14 A. Okay.

15 Q. In paragraph 26, you say, "This study of 20:04:37
16 1,075 U.S. respondents was designed and executed in
17 accordance with accepted standards of survey
18 research. This survey followed the guide" -- "the
19 guiding principles for survey research for the
20 purpose of litigation as outlined by Shari Diamond." 20:04:59
21 [As read]

22 Do you see that?

23 A. I do.

24 Q. Would you agree that Shari Diamond is an
25 authority on best practices for survey research used 20:05:10

Page 226

1 in litigation?

2 A. I would.

3 Q. And you cite this paragraph in both of
4 your reports? Or a similar paragraph in both of
5 your reports?

20:05:24

6 A. I do.

7 Q. And you believe that a reliable and valid
8 survey should follow these principles, the ones
9 listed in the bullets of paragraph 26?

10 A. I do.

20:05:35

11 Q. The second bullet is a "Rigorous and valid
12 survey design that is probative of the relevant
13 issues in the matter."

14 Do you see that?

15 A. I do.

20:05:48

16 Q. And we briefly mentioned it earlier, but
17 did you conduct any pretesting?

18 A. I did not.

19 Q. Why not?

20 A. Well, for both of these surveys, I did not
21 see the need to -- to pretest the survey. There was
22 nothing that concerned me about the design. There
23 was nothing that stood out to me as potentially
24 problematic. So in that scenario, I -- I would not.
25 And in this case, did not do any pretesting.

20:05:56

20:06:19

Page 227

CERTIFICATE OF REPORTER

I, Hanna Kim, a Certified Shorthand Reporter, do hereby certify:

That prior to being examined, the witness in the foregoing proceedings was by me duly sworn to testify to the truth, the whole truth, and nothing but the truth;

That said proceedings were taken before me at the time and place therein set forth and were taken down by me in shorthand and thereafter transcribed into typewriting under my direction and supervision;

I further certify that I am neither counsel for, nor related to, any party to said proceedings, not in anywise interested in the outcome thereof.

Further, that if the foregoing pertains to the original transcript of a deposition in a federal case, before completion of the proceedings, review of the transcript [x] was [] was not requested.

In witness whereof, I have hereunto subscribed my name.

Dated: 20th day of July, 2022



Hanna Kim

CLR, CSR No. 13083

EXHIBIT 59

7/18/2022 Bruce Schneier Deposition Transcript Excerpts

1 UNITED STATES DISTRICT COURT
2 NORTHERN DISTRICT OF CALIFORNIA, OAKLAND DIVISION
3
4

5 CHASOM BROWN, WILLIAM BYATT,
6 JEREMY DAVIS, CHRISTOPHER
7 CASTILLO, and MONIQUE
8 TRUJILLO, individually and on
9 behalf of all other similarly
10 situated,
11

12 Plaintiffs,

13 No.

14 vs.

15 4:20-cv-03664-YGR-SVK

16 GOOGLE LLC,
17

18 Defendant.
19 _____/

20 VIDEOTAPED DEPOSITION OF BRUCE SCHNEIER
21 Remote Zoom Proceedings
22 Cambridge, Massachusetts
23 Monday, July 18, 2022
24
25

26 REPORTED BY:

27 LESLIE ROCKWOOD ROSAS, RPR, CSR 3462

28 Pages 1 - 233

29 Job No. 5312337

30 Page 1

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA, OAKLAND DIVISION

CHASOM BROWN, WILLIAM BYATT,
JEREMY DAVIS, CHRISTOPHER
CASTILLO, and MONIQUE
TRUJILLO, individually and on
behalf of all other similarly
situated,

Plaintiffs,

No.

vs.

4:20-cv-03664-YGR-SVK

GOOGLE LLC,

Defendant.

_____/

Videotaped deposition of BRUCE SCHNEIER,
taken on behalf of Defendant, Remote Zoom Proceedings
from Cambridge, Massachusetts, beginning at 11:03 a.m.
Eastern Daylight Time and ending at 7:20 p.m. Eastern
Daylight Time, on Monday, July 18, 2022, before
Leslie Rockwood Rosas, RPR, Certified Shorthand Reporter
No. 3462.

1 APPEARANCES :

2
3 FOR THE PLAINTIFFS :

4 SUSMAN GODFREY LLP

5 BY: IAN B. CROSBY, ESQ.

6 1201 Third Avenue, Suite 3800

7 Seattle, Washington 98101

8 (206) 516-3861

9 icrosby@susmangodfrey.com

10 -and-

11 BY: ALEXANDER P. FRAWLEY, ESQ.

12 3201 Avenue of the Americas, 32nd Floor

13 New York, New York 10019

14 (212) 729-2044

15 afrawley@susmangodfrey.com

16
17 BOIES SCHILLER FLEXNER LLP

18 BY: HSIAO (MARK) C. MAO, ESQ.

19 44 Montgomery Street, 41st Floor

20 San Francisco, California 91401

21 (415) 293-6800

22 mmao@bsfllp.com

23
24
25
Page 3

1 APPEARANCES (Continued):

2
3 MORGAN & MORGAN

4 BY: JOHN A. YANCHUNIS, ESQ.

5 201 North Franklin Street, 7th Floor

6 Tampa, Florida 33602

7 (813) 223-5505

8 jyanchuis@forthepeople.com

9
10
11 FOR THE DEFENDANT:

12 QUINN EMANUEL URQUHART & SULLIVAN, LLP

13 BY: STEPHEN A. BROOME, ESQ.

14 ALYSSA (ALY) G. OLSON, ESQ.

15 865 South Figueroa Street, 10th Floor

16 Los Angeles, California 90017

17 (213) 443-3285 (Mr. Broome)

18 (213) 443-3000 (Ms. Olson)

19 stephenbroome@quinnemanuel.com

20 alyolson@quinnemanuel.com

21
22 Also Present:

23 Elvert Ling, Quinn & Emanuel summer associate

24 Haimin Zhang, Analysis Group

25 Robert Fenton, Videographer

I N D E X

MONDAY, JULY 18, 2022

WITNESS

EXAMINATION

BRUCE SCHNEIER

BY MR. BROOME

10

BY MR. CROSBY

220

QUESTIONS WITNESS INSTRUCTED NOT TO ANSWER:

(NONE)

1 Q. Okay. You mentioned computer security and
2 network security. Is security -- do you mean keeping
3 people out of systems in which they should not be in?

4 A. That's part of it; right? If I'm running a
5 prison, it's keeping people into systems where they 11:54:23
6 shouldn't be out.

7 So security is very complex, and you probably
8 don't want to debate this at length. I spend time in my
9 books trying to define this term. It's a very squishy
10 term. Because it really has to do with things that are 11:54:41
11 permitted, which implies a permitter, and what does that
12 mean. Things that are prohibited.

13 And it's not just access. In data, we worry
14 about availability. You know, if someone took this Zoom
15 down, it would be a security violation, even though they 11:54:58
16 might not be eavesdropping on us.

17 It's integrity. If someone went in and changed
18 the transcript of this deposition, we'd both be pissed
19 off, but that -- you know, they may not have stolen
20 anything. Security has a lot of aspects to it. 11:55:13

21 Q. Okay. Paragraph 7 says you presently hold the
22 title of Chief Security Architecture at Inrupt Inc. What
23 is Inrupt?

24 A. Inrupt is a company that is commercializing
25 solid. I'll do this relatively quickly. Solid is a web 11:55:34

1 standard invented by Tim Berners-Lee, who actually
2 invented the web -- he's kind of an important guy -- for
3 distributed data ownership.

4 Inrupt is a company that is commercializing that
5 standard. If you know anything about Linux, Inrupt is 11:55:51
6 basically the RedHat of solid.

7 Q. You have formerly been a board member of the
8 Tor Project?

9 A. I was, yes.

10 Q. And what is the Tor Project? 11:56:17

11 A. The Tor Project is a browser extension that
12 allows people to browse the web anonymously.

13 Q. Including from Google?

14 A. Google employees can browse the web anonymously
15 using Tor, yes. 11:56:39

16 Q. Can users of the Tor browser extension browse
17 the web anonymously from Google, meaning Google would not
18 receive any of their data while they browse the web?

19 A. So anonymously doesn't mean not receiving --
20 back to the question. So from Google, I'm interpreting 11:57:01
21 to mean from Google's offices. So I am inside Google and
22 I am using Tor.

23 Q. Okay.

24 A. I think you mean something differently.

25 Q. Yeah, I do. I'm thinking more along the lines 11:57:14

1 of the data collection described or at issue in this
2 case.

3 Is -- is using the Tor browser extension a way
4 to obtain privacy from Google? Let me -- I didn't --

5 A. Yeah. 11:57:33

6 Q. -- solve the problem.

7 A. Yeah. You need to be careful.

8 Q. Yeah, let me try and solve the problem better.

9 Is using the Tor browser extension a way to
10 prevent Google tracking through analytics and ad 11:57:45
11 services?

12 A. No.

13 Q. So, sorry, explain to me again what it is that
14 Tor provides, how Tor provides privacy.

15 A. So Tor is the anonymity service. So when you 11:58:09
16 use the Tor browser, the website you visit doesn't know
17 who you are based on browsing. And it does that through
18 onion routing.

19 So basically what Tor does is it routes your
20 browser requests through a network of other browsers 11:58:33
21 around the world, and it uses three of them, which we can
22 talk about mathematically why that's a good idea if you
23 want. I suspect you don't. But the recipient at the
24 other end, let's say it's The New York Times,
25 substantiate it, doesn't know that you are making the 11:58:48

1 query.

2 Now it does not protect you if you log in. And

3 if you log into The New York Times, you've logged in.

4 And you know, this is something that it turns out to be

5 hard to educate Tor users on sometimes.

11:59:05

6 But specifically, it hides your routing on the

7 internet. So it has uses in evading censorship. Maybe

8 you are a user in China. Maybe you are a user in a

9 company that blocks The New York Times. They don't want

10 you to read the newspaper at work. Tor will mask that

11:59:22

11 from the network.

12 Q. What -- what is it masking specifically? Is it

13 masking your IP address, your user agents, or all of the

14 above?

15 A. Now so I don't want to get it wrong. It will

11:59:41

16 mask the IP address. Whether it masks the other things

17 depends on the details that I -- I would look it up

18 before I answered.

19 Q. Okay. Fair.

20 And I asked you whether it would provide privacy

12:00:06

21 or prevent, rather. I asked you whether it would prevent

22 Google from tracking you using the analytics and

23 advertising services that are at issue in this case, and

24 you said "no." And why is that?

25 A. So the analytics, as far as I understand it,

12:00:27

1 happen at the web server. The web server contracts with
2 Google, puts Google code on its server, and that
3 communicates back to Google.

4 So what Tor is doing, it's protecting the
5 connection between myself and The New York Times. It is 12:00:46
6 limiting, but not -- but not to zero the data The New
7 York Times gets about me. Anything The New York Times
8 gets is transmitted back to Google.

9 So Google is getting the full take of what The
10 New York Times is sending it. 12:01:06

11 Q. But The New York Times doesn't know who you are;
12 right?

13 A. They might.

14 MR. CROSBY: Object to the form.

15 Q. BY MR. BROOME: How about if you don't sign in? 12:01:13

16 A. But if there is a cookie from a previous sign
17 in. I don't know how The New York Times might be
18 figuring out who you are. I also don't know how Google
19 might figure out who you are based on the information
20 provided. 12:01:29

21 Tor is designed so that people in the middle,
22 like you are the Chinese firewall making sure that I
23 don't go to Wikipedia and look up Falun Gong. That's the
24 threat model.

25 And what Tor is providing is anonymity so that 12:01:44

1 China doesn't know what you're looking up on Wikipedia,
2 Wikipedia doesn't know where they're sending the Falun
3 Gong article to, and the censor in the middle just sees
4 opaque traffic. That's the threat level. That's what
5 Tor does.

12:02:03

6 Anything else is going to be ancillary, and it's
7 going to depend on a lot of things that I don't know.
8 But it's not what Tor is intended to do.

9 Q. You've published 12 books; is that right?

10 A. I like to say approximately 12 because it's
11 harder than you think to count books.

12:02:22

12 Q. Okay. How many -- how many books were on the
13 topic of privacy?

14 A. Many books touch on privacy, but one book was
15 about privacy, and that's Data and Goliath.

12:02:39

16 Q. Okay. What about Click Here to Kill Everybody?

17 A. Privacy's in there, but it's really about
18 security and safety.

19 Q. Okay. Do you know approximately how many copies
20 of Data and Goliath were sold?

12:02:51

21 A. I should know that, and the answer is yes, but I
22 can't remember.

23 Q. Can you ballpark it?

24 A. Under a hundred thousand, but not much under a
25 hundred thousand.

12:03:03

1 Q. Okay. And what about Click Here to Kill
2 Everybody?

3 A. Less. I'm going to say 35,000. I'm guessing
4 here, but it will be ballparking.

5 Q. Do you encourage your students to read your 12:03:18
6 books in any of your classes?

7 A. You know, I think it's kind of rude to tout your
8 own stuff in your own class. It feels a little
9 self-serving. I do assign chapters of some of my books,
10 but I give them a photocopy so they don't have to buy it, 12:03:34
11 but I try to have them read other -- other authors. I
12 figure they get enough of me in class. They don't need
13 more of me.

14 Q. Have you ever testified as an expert in
15 litigation before? 12:03:46

16 A. I have.

17 Q. How many times?

18 A. I don't know, but the last page of my CV -- oh,
19 wait. Cross that out. I've never testified in trial.
20 You people always settle before it goes to trial. I have 12:04:00
21 been deposed, and the number of times is in the last page
22 of the CV if you count them up.

23 MR. BROOME: I won't take offense to the term
24 "you people."

25 Okay. We've been going a little over an hour 12:04:16

1 Where you say: "Remember that the private
2 browsing option on your browser only deletes data
3 locally," does the -- does the end note indicating that
4 you are basing that statement at least in part on the
5 article by Sara Watson? 12:49:14

6 A. It doesn't. It implies that. It doesn't
7 necessarily mean that. I'll use references for a bunch
8 of different reasons. I'll use them for giving readers
9 further information, places for them to go. I'll use
10 them as citations. But I'm pretty fast and loose. I'm 12:49:29
11 not even using footnotes in the book. Footnotes scare
12 readers. They are these kind of weird end note that's
13 disassociated. So without seeing the article, I don't
14 think I could tell you. If I saw it, I'm not sure I
15 could tell you. It's a long time ago. But it's 12:49:46
16 certainly something I pointed readers to if they wanted
17 to understand that phrase better.

18 Q. Does it mean that you read the article? Would
19 you have read the article if you had included it in the
20 end notes? 12:49:58

21 A. It does mean I read the article.

22 Q. Okay. So let's load the article.

23 A. Oh, cool.

24 (Exhibit 4, Ask the Decoder: How Private is

25 Private Browsing, Really? By Sara M. Watson, 12:50:02

1 09/24/14, was marked for identification by
2 counsel electronically.)

3 Q. BY MR. BROOME: All right. We've loaded an
4 article. This one you probably don't have in hard copy.

5 A. I don't. Can it be bigger? 12:50:31

6 Q. I'd be impressed if you did, though. That would
7 be a great anticipation skill there.

8 A. I'm totally well prepared.

9 Q. That's Mark's fault.

10 Are you trying to load another copy? I think 12:50:50
11 we're going to load another copy just to get the exhibit
12 stamp on there.

13 A. I've got it on the screen.

14 All right.

15 Q. All right. So you read this article in 12:51:58
16 connection with your book Data and Goliath. "Yes"?

17 A. In 2014, yes.

18 Q. Okay. And if you look at, let's see, page 3 of
19 the PDF, do you see there's a paragraph beginning: "The
20 real disconnect"? 12:52:16

21 A. Yes.

22 Q. Okay. It says: "The real disconnect for Jen
23 was that private browsing mode clears your browsing
24 history only from your local machine, whether it's your
25 computer or your phone, not from anywhere else." 12:52:31

1 And that was consistent with your understanding
2 of private browsing in 2014; correct?

3 A. Yes.

4 Q. Okay. You can put that one away. Now we're
5 going to load -- 12:53:01

6 A. Sorry. It's fun to read the oldies.

7 Q. Yeah.

8 A. Randomly, I saw Sara two days ago.

9 Q. Mr. Schneier, is it fair to say that any
10 articles that you've cited in your expert report you've 12:54:08
11 read before submitting your report?

12 A. Yes.

13 Q. Okay. Let's load that one.

14 Okay. We're going to load another exhibit, and
15 this one gets a little tricky as well. You have the -- 12:54:48
16 your book Kill Everyone?

17 A. The title is Click Here to Kill Everyone.

18 Q. I'm sorry, Click Here to Kill Everyone.

19 A. Which I think demonstrates my marketing
20 expertise. That's my title. 12:55:07

21 Q. Very creative. Much better than the one I just
22 came up with. Sounds --

23 A. I'm actually good at book titles.

24 (Exhibit 5, Schneier on Security: Click Here to
25 Kill Everybody Endnotes, was marked for 12:55:13

1 identification by counsel electronically.)

2 Q. BY MR. BROOME: I think Data and Goliath is a
3 very good one.

4 A. Yeah. You know, some people mispronounce data
5 as data, and they don't get the joke. 12:55:26

6 Q. Okay. So we have loaded Exhibit 5. And this
7 has -- this is on your blog. It has the end notes. At
8 least we think, and I'm hoping you can confirm, to Click
9 Here to Kill Everyone?

10 A. That is correct. And I can match them with what 12:55:48
11 I see in the book.

12 Q. Yeah. So when we go to paragraph 16 -- let me
13 find the actual end note. Or page 16 of the PDF, rather.

14 A. Give me the page number, starts with the end
15 note. That will help me find it. 12:56:08

16 Q. Yeah, it's -- okay, 58. It says -- are you
17 there?

18 A. I'm there.

19 Q. Okay. It says: "We never lie to our search
20 engines. Settings like Chrome's Incognito mode or 12:56:28
21 Firefox's private browsing keep the browser from saving
22 your browsing history. It does not prevent any websites
23 you visit from tracking you."

24 Do you see that?

25 A. I don't. So let me try to find it. 12:56:41

1 What is the highlighted text?

2 Q. "We never lie to our search engines." It should
3 be 58, I think.

4 A. 58. I see. I got it. Sorry, I got it. I was
5 on 38. My apologies. 12:56:58

6 Q. All right. Do you see that text? It says: "We
7 never lie to our search engines. Settings like Chrome's
8 Incognito mode or Firefox's private browsing keep the
9 browser from saving your browsing history. It does not
10 prevent any websites you visit from tracking you"? 12:57:12

11 A. Yes, that is correct.

12 Q. And when did you publish this book?

13 A. This was published in 2018, I believe. Correct,
14 which means it was written in 2017.

15 Q. While we're loading the article, I just want to 12:57:59
16 go back to your opening report, which I think is
17 Exhibit 1.

18 You have a hard copy.

19 A. Uh-huh.

20 Q. And if you go to paragraph 301, note 326. I see 12:58:09
21 you didn't spare the lawyers the footnotes.

22 A. You guys like footnotes.

23 Q. We love footnotes.

24 A. They're shorter than you guys usually like.

25 Q. Well, we just use them to avoid space 12:58:35

1 constraints.

2 A. Fair.

3 Q. Do you see at 326, it says Lori -- it cites to
4 an article by Lori Clark titled Google's Chrome Incognito

5 Mode is Way Less Private Than You Think? 12:58:52

6 A. I do.

7 Q. Okay. And that was published July 20th, 2019?

8 A. According to me, yes.

9 Q. According to you. We'll confirm that next.

10 And that's in the -- during the class period; 12:59:04

11 right? Before the Complaint was filed?

12 A. Yes.

13 Q. Okay. And did you -- I think you said before
14 that you would have read this article in preparing your
15 report? 12:59:13

16 A. I did.

17 (Exhibit 6, Google's Chrome Incognito Mode is
18 Way Less Private Than You Think, by Laurie
19 Clarke, was marked for identification by counsel
20 electronically.) 12:59:20

21 Q. BY MR. BROOME: All right. Now let's go back,
22 and you should have an Exhibit 6.

23 Does this look like a -- well, I'll represent to
24 you this is a printout of the article cited in your
25 report. 12:59:41

1 A. And I will trust you.

2 Q. Okay. Do you see at the bottom of the first

3 page, she says: "Despite the long-known fact that

4 Incognito isn't truly anonymous, new research has

5 reemphasized that Google and other web browsers are still 13:00:02

6 tracking you in privacy mode, even on the most sensitive

7 of sites"?

8 A. No, I'm not seeing it.

9 Q. Yeah, I didn't do a good job of orienting you

10 there. On the first page, it's the very last few words 13:00:15

11 after the last full sentence.

12 A. Yes, I see it. Thank you.

13 Q. "Despite the long-known fact"?

14 A. Uh-huh.

15 Q. All right. I'll just read it again. 13:00:28

16 "Despite the long-known fact that Incognito

17 isn't truly anonymous, new research has re-emphasized

18 that Google and other web browsers are still tracking you

19 with privacy mode, even in the most sensitive of sites"?

20 MR. CROSBY: I'm sorry, Counsel, where exactly 13:00:44

21 are you Exhibit 6?

22 MR. BROOME: It's a bit tricky to find.

23 THE WITNESS: It's the last line of the first

24 page of Exhibit 6, in the middle of the last line.

25 MR. CROSBY: The first page of Exhibit 6 has got 13:00:57

1 the picture.

2 THE WITNESS: A giant photo and three lines.

3 Look at the last line of those three lines, starting in
4 the middle.

5 MR. CROSBY: Okay. Got it. Thank you very 13:01:06
6 much. Continue.

7 Q. BY MR. BROOME: Okay. And do you agree with
8 that statement or the implication of that statement, that
9 the fact that Incognito isn't truly anonymous is a
10 long-known fact? 13:01:24

11 A. I don't know. I'd like to think that everyone
12 buys my books and reads all the footnotes. You know, I
13 can't guarantee. I keep saying it. So I -- I mean, so
14 it's going to depend. I -- I wouldn't write that. I
15 wouldn't write it that way. 13:01:45

16 Q. Do you see on page 2, there's a quote, the third
17 paragraph down, or I guess the second full paragraph down
18 says: "Private modes in web browsers were never designed
19 as a general privacy fix" --

20 A. I do see that. 13:02:40

21 Q. -- "says Mr. Lukasz Olejnik, independent cyber
22 security and privacy advisor."

23 Do you know who Lukasz Olejnik is.

24 A. I don't know if I've met him. We email
25 correspond. So does that count as knowing who he is? 13:02:56

1 Q. Yeah, I mean you know who he is. Yeah. Yep.

2 And okay. And then it says, it goes on to quote
3 him as saying: "In practice, they offer very little."

4 Do you see that?

5 A. I do. 13:03:12

6 Q. And then the article of the author of the
7 article writes: "The modes are short-term options that
8 can limit what's recorded on one machine, not an
9 all-encompassing way to be private online. The main
10 functionality of Incognito mode is not saving cookies or 13:03:28
11 browser history on the hard disk, meaning that private
12 browsing sessions are isolated from normal ones."

13 Do you agree with each of those two statements?

14 A. Yes.

15 Q. In the next paragraph, she writes: "Third-party 13:03:46
16 tracking is generally achieved by websites storing
17 cookies on a visitor's hard drive. Cookies are generally
18 used to track repeat visits from the same user and build
19 up a profile that's used to serve ads. In Incognito
20 mode, your data is tracked in exactly the same way as 13:04:07
21 normal mode. The difference is that in ordinary
22 circumstances, trackers are unable to link a private
23 browsing session with a normal session."

24 Do you see that?

25 A. I do. 13:04:21

1 Q. And do you agree with the statements in that
2 paragraph?

3 A. You know, I would cross out the word "exactly"
4 if I were writing it, and I would probably be more
5 equivocal than unable. 13:04:31

6 Q. Okay. And why would you cross out the word
7 "exactly"?

8 A. Because if there's any difference at all, the
9 statement's incorrect.

10 Q. Okay. 13:04:42

11 A. You asked me if I agree with it. Right? If
12 it's like blue instead of red. Suddenly it's different.

13 Q. Yeah, that's fair.

14 A. So without knowing the details, you know, those
15 kind of words are -- can be hard to use. 13:04:53

16 Q. Okay. Would you agree that an individual who
17 read this book -- or sorry, this article would understand
18 that private browsing mode does not prevent Google from
19 tracking them across the web?

20 A. I have no idea -- 13:05:21

21 MR. CROSBY: Object to the form.

22 THE WITNESS: I have no idea what readers
23 understand.

24 Q. BY MR. BROOME: Okay. Do you have any idea what
25 class members understand? 13:05:30

1 1:07 p.m.

2 (Recess.)

3 THE VIDEOGRAPHER: We are back on the record at

4 1:25 p.m.

5 Q. BY MR. BROOME: Mr. Schneier, I just want to go 13:25:06

6 back to the question I asked you right before the break.

7 I said: "And you don't have any opinion about what class

8 members understand when they read the disclosures that

9 are at issue in this case; is that accurate?"

10 And your answer was: "My opinions are really 13:25:23

11 informed, you know, what's being disclosed, the general

12 principles we have in the industry of how to disclose

13 things, and it's not based on surveys on what readers

14 understand."

15 And I take all that, and I think I understand 13:25:34

16 your answer. But I just -- I just want to try to get a

17 "yes" or "no" to my question, if that's possible.

18 And again, the question was: You don't have any

19 opinion in this case about what class members understand

20 when they read the disclosures that are at issue in this 13:25:50

21 case?

22 A. Way to highlight my bad grammar.

23 Q. No --

24 A. I was not asked to provide opinions on what

25 class members believe. 13:26:02

1 Q. Okay. Sorry. Go ahead. I interrupted you. Go
2 ahead.

3 A. So I was not asked to provide opinions on what
4 class members believe. I was asked to provide opinions
5 on what Google discloses. So those are my opinions. 13:26:15

6 Q. Okay. Prior to the Complaint being filed in
7 this case, have you ever used a private browsing mode.

8 A. I have not, no.

9 Q. And why is that? I mean, if you're a
10 privacy-focused guy; right? You use extensions and 13:26:42
11 plug-ins. Why did you never use a private browsing mode?

12 A. I never used a shared computer.

13 Q. Okay.

14 A. I mean that slightly. And if I happen to be on
15 a shared computer, I'm not doing personal browsing. 13:27:06

16 Q. Okay. All right.

17 So on this topic of you not opining about what
18 class members or users in private browsing mode
19 understand, I just want to take a look back at your
20 report, which again is Exhibit 1. And if we could go 13:27:42
21 to -- we'll start at 285.

22 Let me know when you're there.

23 A. I'm here.

24 Q. Okay. In the last sentence on 285 you say:
25 "Google's disclosures give rise to a reasonable 13:28:09

1 expectation that Google will not collect users' private
2 browsing information."

3 You don't know whether any class members
4 actually had that expectation; correct?

5 A. That's right. And if you look at the paragraph, 13:28:19
6 it's about Google's disclosures. About what is being
7 disclosed, not about recipients.

8 Q. Uh-huh. Okay.

9 Then if you will turn to 298 -- sorry, not 298.
10 296. 13:28:53

11 A. I'm there.

12 Q. You discuss the splash screen. You say: "The
13 splash screen statement that Chrome won't save your
14 browsing history gives rise to a reasonable expectation
15 that the user's Incognito browsing history will not be 13:29:10
16 collected or saved by Google."

17 Do you see that?

18 A. I do.

19 Q. And again, you don't know whether any class
20 members or users in private browsing modes actually held 13:29:19
21 that expectation; correct?

22 A. That's correct. And again, this sentence talks
23 about what Google discloses and how we in the industry
24 view how disclosures work, what is done, what -- how you
25 disclose to users. So that sentence is about the 13:29:42

1 A. Again, it will depend how it's used. If I say,
2 you know, when you go to the bathroom, you're private in
3 there, and you find out later there's a camera. And I
4 say, "Well, don't worry, the camera went to the police; I
5 didn't see it," you're going to say what the hell. So it 13:59:12
6 depends on lot on how that word's used.

7 Q. In the splash screen where Google says "now you
8 can browse privately and other people who use your
9 device" -- "your device won't see your activity," is it
10 your opinion that that conveys two separate concepts: 13:59:43
11 One, on the one hand, you can browse privately from
12 Google, and on the other hand, you can browse privately
13 from other people who use your device?

14 A. I think it's actually kind of like the "camera
15 in the bathroom" story; right? What I said is: You go 14:00:02
16 to the bathroom, and it's private. What the splash
17 screen says is it's private. There's a period at the
18 end. There's not a caveat. There's not like from me,
19 from Google, from your neighbors, from your friends. It
20 is a -- it's given as a categorical. And that implies 14:00:23
21 that it is complete. That it is from everybody. Because
22 we're not saying only in this way, only in that way.

23 If I wanted to convey to you that when you went
24 into the bathroom, it would be private from me, but the
25 police could watch you, I would kind of say that. I 14:00:45

1 wouldn't say now you can pee privately and put a period
2 on it. That's a very crappy analogy. I'm going to
3 change it and do it again. I'm sorry.

4 Q. I've got to say I actually really like it.

5 A. No, it's a bad analogy. 14:00:59

6 Q. No, they're good ones. They're really good ones
7 and they're practical real-world examples. I like it.

8 A. But I want to get one, yes, scatological.

9 Q. Do you agree that by providing -- I guess let
10 me -- let me try and formulate a better question here. 14:01:21

11 Do you agree that if Incognito mode only
12 provides privacy from other people who use your device --
13 well, now I put the answer in the question. Let me try
14 again.

15 Do you believe that if Incognito mode conceals 14:01:38
16 your browsing activity from other people would use your
17 device, that Incognito mode provides a measure of
18 privacy?

19 A. Yes.

20 Q. Okay. Actually, maybe we will go to -- well, 14:02:05
21 I'll try this again with Data and Goliath, and you can
22 tell me if you want to go back to the source.

23 You have a statement in there that says: "Most
24 people don't seem to care whether their intimate details
25 are collected and used by corporations. Most people are 14:02:21

Page 104

1 happy to exchange sensitive personal information for free
2 email, web search, or a platform on which to chat with
3 their friends."

4 Do you agree with those statements?

5 A. You know, I would not write that today. 14:02:39

6 Q. Okay. What's changed?

7 A. I think people's awareness has changed. People
8 are more aware of -- of in general how they're being
9 tracked on the internet. I think there's a feeling of
10 helplessness among people and so "happy," too, is a word 14:02:58
11 I would not use anymore. And I don't even know if it was
12 right then. I think people are more grudgingly
13 accepting, in many cases.

14 There's a lot of unawareness. I find this even
15 in my classes when I try to teach the stuff, that 14:03:20
16 surprised the number of people that are surprised.

17 There was a class last year, and there was
18 someone from Facebook in the class talking about Facebook
19 data collection and how it's used, and people are
20 expressing surprise that a lot of this is happening. 14:03:37

21 And the former employee, who is now a student
22 there, said: "This is how Facebook works. Don't you
23 realize that?"

24 So it is an interesting measure of complicated
25 things that are going on. And you know, that -- those 14:03:52

1 sentences imply a knowing and willing tradeoff that isn't
2 right today and I don't think it was right then.

3 Q. Would you agree that some people just don't care
4 about data collection by companies like Google and
5 Facebook and Amazon? 14:04:13

6 A. You used the word "some." So I will agree there
7 exists one person that just doesn't care.

8 Q. Would you agree that there's a substantial
9 portion of the population that just don't care?

10 A. Yeah, but I would make you define "substantial" 14:04:24
11 before I answer that one.

12 Q. 40 percent.

13 A. I would not agree with that.

14 Q. Okay. Do you have any basis for refuting that,
15 you know, 40 percent of the population doesn't care? 14:04:40

16 A. It sounds high and I don't have data.

17 Q. Okay.

18 A. Pew Research has data.

19 Q. Okay. Would you agree that incognito, the term
20 "incognito" has a different meaning than private or 14:05:06
21 privacy?

22 A. Yes.

23 Q. Okay. And what is the meaning of "incognito"?

24 A. Can I refer you to paragraph 25 of my report?

25 Q. Yeah. 14:05:22

1 A. Good.

2 Q. All right. One of the definitions you use is,
3 you say: "The Oxford English Dictionary defines
4 "incognito" as unknown, whose identity is concealed or
5 unavowed, and therefore not taken as known." 14:05:41

6 Do you see that?

7 A. I do.

8 Q. Okay. And would you agree that in Incognito
9 mode -- well, let me -- let me back up.

10 Do you understand that -- you have an 14:05:53
11 understanding of how Incognito mode functions; correct?

12 A. Basically, yes.

13 Q. And you have an understanding of how other
14 private browsers' modes function -- private browsing
15 modes function? 14:06:06

16 A. Similarly, basically, yes.

17 Q. Okay. And with respect to Incognito mode, you
18 understand that it automatically logs the user out of
19 their Google account.

20 Do you understand that? 14:06:16

21 A. Yes.

22 Q. And do you understand that it blocks the sharing
23 of existing cookies with websites and Google and others
24 out there on the web?

25 A. Right. What I understand it does, is it 14:06:28

1 basically opens up a separate compartment --

2 Q. Uh-huh.

3 A. -- which will have no cookies from the regular

4 browsing. So there is a separate set of cookies.

5 Q. Right. So that websites and Google and any 14:06:41
6 other entities on the web who may engage in tracking
7 cannot use the cookies on the browser that existed before
8 the Incognito session to track the user.

9 Is that your understanding?

10 A. No. 14:06:55

11 Q. Have you seen -- okay. So what is your
12 understanding on that issue, then?

13 A. It's what I said previously, that the private
14 browsing opens up a separate compartment where the
15 cookies from the regular browsing don't transfer over, 14:07:12
16 and new cookies are created.

17 Q. Right. And then at the end of the session,
18 those cookies in the Incognito compartment are deleted;
19 right?

20 A. That is correct. 14:07:22

21 Q. Okay. And so to the extent any tracking occurs
22 in an Incognito session, it's based on the cookies in the
23 new Incognito compartment.

24 Do you understand that?

25 A. It is based -- 14:07:35

1 MR. CROSBY: Object to the form.

2 THE WITNESS: -- in part on those cookies, yes.

3 Q. BY MR. BROOME: Okay. And what else is it based
4 on?

5 A. Everything else Google or anybody else does. 14:07:42

6 Q. Is it based on IP address?

7 A. I don't know.

8 Q. Is it based on any other data that Google
9 receives from the user other than cookies?

10 A. Define "receives by the user" better. 14:08:07

11 Q. Any information that is transmitted to Google
12 from, for example, an analytics or ad manager script.

13 A. Okay. So you're saying that if I as a user
14 visit The New York Times --

15 Q. Yeah. 14:08:26

16 A. -- and do stuff, that analytics information that
17 goes to Google is from me?

18 Q. For purposes of this question, sure.

19 A. Okay. Got to go to the question again because I
20 lost the question. I'm sorry, I'm actually trying to -- 14:08:43
21 this actually is complicated.

22 Q. Yeah. No, let's --

23 A. It's a bit complicated.

24 Q. Okay. Is it your understanding that in the
25 ordinary course, Google uses cookies to track users? 14:08:49

1 Q. BY MR. BROOME: Uh-huh.

2 A. You're asking -- try again. The problem I think
3 we're having is that these things might be something that
4 Google figures out based on a variety of pieces of
5 information. So I need to know really what you're saying 14:10:43
6 and is it wholly or is it in parts. So as you phrase the
7 question, you know, try to be more precise about what you
8 really want to know.

9 Q. Sure.

10 A. And this is legit complicated. 14:10:56

11 Q. Sure. No, it's okay.

12 Let me try another example. So user initiates
13 an Incognito session. All other settings are default.

14 A. Okay.

15 Q. The user initiates an Incognito browsing 14:11:09
16 session. Goes to The New York Times. Doesn't log in.

17 A. Right.

18 Q. Goes to The New York Times. Does Google know
19 the identity of that user?

20 A. Potentially, yes. 14:11:26

21 MR. CROSBY: Object to the form.

22 Q. BY MR. BROOME: How so?

23 A. If they can correlate the user's browsing
24 session with other browsing sessions where it knows the
25 identity, then it can link those two. So in the same way 14:11:38

Page 111

1 you're browsing the web on your computer, and then later
2 you browse the web on your phone, and Google is able to
3 link those two browsing sessions to you, and in one of
4 them, it knows your identity, now it knows your identity
5 in both. It knows they're the same. 14:12:00

6 Q. Okay. But in my example, nobody is signed in.
7 They're in Incognito, and nobody has signed into the
8 website and they haven't signed into their Google domain.

9 Have you seen any evidence in this case
10 indicating that Google could then correlate the data from 14:12:14
11 the private browsing session with data from a regular
12 mode browsing session?

13 A. I think in some circumstances, they can, yes.

14 Q. That's not quite my question, though.

15 Have you seen any evidence that Google has 14:12:29
16 actually done that?

17 A. I have not seen evidence about what Google does.
18 Really, my report is about what they could do. So no, I
19 have not seen reports from Google that show whether they
20 do or do not do these things. 14:12:48

21 Q. Okay. So if Google does not do these things, if
22 it does not correlate private browsing -- private
23 browsing sessions -- data from private browsing sessions
24 with data from regular mode sessions, and the user has
25 not signed into their account, either at Google or the 14:13:45

1 website, in our example The New York Times, does Google
2 know the identity of the user?

3 MR. CROSBY: Object to the form.

4 THE WITNESS: There's a lot of hypothetical
5 there. So you're basically saying -- asking me if Google 14:14:00
6 chooses not to figure out the identity of the user, do
7 they know the user. That's the way...

8 Q. BY MR. BROOME: Yeah, that's not how I meant it.

9 A. Okay.

10 Q. I mean, yeah, if Google -- let me think about 14:14:12
11 this.

12 Hypothetical: A user launches an Incognito
13 window, goes to The New York Times, does not sign into
14 any accounts. Assume Google does not correlate private
15 browsing data with regular mode data, does Google know 14:14:46
16 the identity of the user?

17 MR. CROSBY: Object to the form.

18 THE WITNESS: You know, I'm not -- I don't have
19 access to what Google can do. And what you -- so I'm
20 going to re-interpret what you're saying. 14:15:03

21 Google chooses not to form the -- what you said.
22 Basically you're asking me is there any other way that
23 Google could identify the user other than not doing the
24 thing they choose not to do. And the answer is I don't
25 know. I don't have enough visibility into all of 14:15:22

1 So the fact that you chose at that moment to
2 browse the web privately is, in fact, private
3 information.

4 Q. Okay. And then -- so if private browsing modes
5 were redesigned to indicate every time -- you know, to 15:16:23
6 websites every time somebody is in a private browsing
7 mode, do you think that would be a good thing or a bad
8 thing?

9 A. There's no question because it's mixed. Do I
10 want to tell The New York Times when I'm browsing 15:16:40
11 privately or not; right? So I'm designing off the top of
12 my head so do not take someone's random designs like
13 off-the-cuff as final.

14 I'd want to give users the choice of signaling
15 or not. But then, you know, on the other hand, you know, 15:17:00
16 is a user going to be sophisticated enough to be able to
17 do that well. That's going to be your balance.

18 But I can imagine times when I would want to
19 signal that and times when I wouldn't.

20 Q. If Google sent an email to a user, Google 15:17:35
21 account holder, and said -- that conveyed, you know,
22 this -- your device was used to browse in private, and
23 let's assume that device is a shared device, does that in
24 and of itself constitute an invasion of privacy?

25 A. So you're asking me if Google sends an email to 15:18:07

1 your personal Gmail account --

2 Q. Uh-huh.

3 A. -- and you access on a shared browser, does that
4 constitute an invasion of privacy? Am I reframing your
5 question right? 15:18:24

6 Q. Yeah, I think so.

7 A. I think it doesn't.

8 Q. And why is that?

9 A. It doesn't feel like it does.

10 Q. Well, it might not be you that was doing the 15:18:36
11 private browsing; right?

12 A. But it's my Gmail account. So wait, wait, wait
13 a second. So, yeah. See, this is why you do not accept
14 design decisions off the cuff in conversation; right?

15 Q. Fair enough. 15:18:52

16 A. Because it's all of this stuff. Stuff you have
17 to think about it, you've got to write it down and look
18 at the flows. Guess I would back off and say I don't
19 know. I'd need to think about it because you're right,
20 that is something you would have to consider. 15:19:09

21 Q. All right. Well, let's put it this way in more
22 general terms.

23 If Google alerted the owner of a shared device
24 that the other-- that someone else who uses that device
25 had been browsing in private, that in and of itself would 15:19:24

1 be a privacy violation; right?

2 A. Well, let's give an example. I am an abusive
3 husband. We have a shared computer. My wife used
4 private browsing. I got an email. I suspect she gets
5 beat up over this. It feels like a privacy violation. 15:19:40

6 Q. Okay. 87. You say: "When browsing the
7 internet people often start on a search page and then
8 click from that page to other websites. For example,
9 someone might start with a Google search, then visit a
10 non-Google website based on those search results. 15:20:11
11 Information tied to that search term and subsequent
12 browsing, including individual URLs and the record of an
13 entire browsing session reveals a great deal of personal
14 information about an individual."

15 Do you see that? 15:20:24

16 A. I do.

17 Q. Would you agree that many people do not start
18 their private browsing sessions by going and conducting a
19 Google search?

20 A. I don't have the data on that so I wouldn't 15:20:45
21 necessarily agree to that.

22 Q. Okay. Well, would you agree that if you want to
23 keep your private browsing activity private from Google,
24 then beginning your private browsing session with a
25 Google search is probably not a good way to go about it? 15:21:01

1 A. I certainly wouldn't do it, but you didn't ask
2 me what I do. I'm three sigma.

3 Q. Paragraph 84. You refer to fingerprinting
4 techniques.

5 A. Uh-huh. 15:21:56

6 Q. Have you seen any evidence that Google has
7 engaged in fingerprinting in this case?

8 A. Yeah, I read internal documents that talk about
9 fingerprinting and internal Google documents, but I don't
10 think they actually said we do this particular practice. 15:22:19
11 And other than that, no.

12 Q. Would you agree that fingerprinting should
13 generally be avoided?

14 A. See, that's a hard question. You're back to
15 "should generally be," by whom. Maybe your at the NSA, 15:22:37
16 you want to do it; right? It's your job. That's what
17 you get paid for. I might not like it personally. So
18 who should be avoiding it?

19 Q. No, that's a fair response. Let me ask it
20 slightly differently. 15:22:54

21 Would you agree that fingerprinting is an
22 invasion of privacy?

23 A. I think that device fingerprinting can be, yes.

24 Q. Okay. Are there circumstances under which it
25 would not be an invasion of privacy? 15:23:05

1 A. Probably. Again, you know, it would take us a
2 while to eliminate all circumstances. The one that came
3 to mind, which I'm now wondering about, if you call 911
4 on your smartphone, you know, and for some reason the
5 call disconnected, it would be great if I could 15:23:24
6 fingerprint your device and know your location
7 immediately.

8 Now thinking about that more, that's an invasion
9 of privacy. It's one that will be welcome by the person
10 who's being attacked and their cell phone is ripped out 15:23:35
11 of their hands, but you know, there are always edge
12 cases. So I hesitate to make -- to make those
13 categoricals without really thinking about edge cases.

14 Q. Okay. Does fingerprinting identify an
15 individual or does it identify a device? 15:23:55

16 A. Fingerprinting identifies a device, which -- and
17 devices can identify individual.

18 Q. Right. And would you agree that with this
19 statement, this is from -- well --

20 Just confirming something with my colleague. 15:24:30

21 Devices may identify an individual, but they may
22 just identify -- they may not. Is that --

23 A. They may not. I mean, something we're learning
24 over the past few years, it's easier than we thought to
25 go from a device to an individual. 15:24:49

1 Q. In paragraph -- I'm sorry, in footnote 88, you
2 say this article that you and Karen Levy wrote together?

3 A. Yes.

4 Q. Privacy Threats in Intimate Relationships?

5 A. Yes. 15:25:20

6 Q. And in that article, I think it's at page 10. I
7 can show you the article, if you like. But we'll see if
8 you need it.

9 You say: "Households are not units, devices are
10 not personal, the purchaser of a product is not its only 15:25:29
11 user."

12 Do you agree with those statements?

13 A. Can I see it in situ.

14 Q. Absolutely. Totally fair.

15 A. Just to see it. Just to make sure. 15:25:40

16 MR. BROOME: Yeah.

17 (Exhibit 7, Journal of Cybersecurity, Research
18 Paper, Privacy Threats in Intimate
19 Relationships, by Karen Levy and Bruce Schneier,
20 was marked for identification by counsel
21 electronically.)

22 THE WITNESS: Okay. I'm there.

23 Q. BY MR. BROOME: Let me load it.

24 A. The words sound familiar. Remind me where it
25 is. 15:26:02

1 Q. So we've loaded Exhibit 7, which is your article
2 Privacy Threats in Intimate Relationships, which you
3 coauthored with Karen Levy; is that accurate?

4 A. Yes.

5 Q. Okay. And let's see. First of all, on page 2, 15:26:13
6 bottom left, very last sentence beginning in the
7 left-hand column on page 2. It says: "People living in
8 the same household may share computers, phones, and other
9 connected devices."

10 Do you see that? 15:26:31

11 A. That was a long page. Yes, I do see it.

12 Q. Okay. And do you agree with that?

13 A. Yes.

14 Q. And then if you go to -- skip ahead to page 10.

15 A. I'm there. 15:26:48

16 Q. Okay. Right in the heading there, Implication 6
17 says: "Realize that households are not units; devices
18 are not personal; the purchaser of a product is not its
19 only user."

20 A. Yes. 15:27:24

21 Q. And I had asked you if you agreed with that. Do
22 you agree with that?

23 A. So that is a -- an implication. So what that's
24 saying is that those things are not always true. I mean,
25 it's a person over a product is often its only user in 15:27:36

Page 134

1 the example of a smartphone. So I mean, that's shortened
2 because it's the title of a section so there's a bunch of
3 caveats missing.

4 Q. Okay. But as a general matter, you would agree
5 that households are not units and devices are not -- 15:27:57
6 households are not necessarily units and devices are not
7 necessarily personal?

8 A. Yes. As a design assumption.

9 Q. Okay.

10 A. That's who I'm speaking to. I'm speaking to 15:28:12
11 designers of systems.

12 Q. Right. And well, you're speaking to designers
13 of systems, and this is a design assumption, but it is a
14 design assumption that is a -- has a real-world practical
15 application; right? 15:28:30

16 A. Yes.

17 Q. All right. Okay.

18 Can we go back to your Data and Goliath book for
19 a moment. I think that was 3, Exhibit 3. Page 217 in
20 the book, page 155 in the PDF. 15:29:08

21 A. I'm here.

22 Q. There's a heading that says "Distort
23 Surveillance."

24 Do you see that?

25 A. I do. 15:29:37

1 Q. It says: "I have my browser configured to
2 delete my cookies every time I close it, which I do
3 multiple times a day. I am still being surveilled, but
4 now it's much harder to tie all those small surveillances
5 back to me and ads don't follow me around." 15:29:54

6 Do you see that?

7 A. I do.

8 Q. Why did you configure your browser setting to
9 delete cookies every time you close your browser?

10 A. It's an easy thing to do, and I think it -- it 15:30:04
11 helps block surveillance in some cases.

12 Q. Does it provide some degree of privacy?

13 A. I think it provides some degree of privacy, yes.

14 Q. Privacy from internet tracking companies?

15 A. Yes. 15:30:21

16 Q. Privacy from Google?

17 A. You know, I've learned a lot more about Google
18 tracking than I knew in 2014 so I'm not sure. You know,
19 these days I think Google is able to join to various
20 sessions of mine, or at least some of them. 15:30:37

21 Q. Right. But you haven't seen any evidence that
22 Google's actually done that; correct?

23 A. No, but I think it would be a bad business model
24 if they didn't. I mean, I can see what they talk about
25 in their writings to analytics customers. For me, it's 15:31:08

1 followed me around.

2 So I think the answer is I've seen a bunch of
3 anecdotal evidence, but no direct evidence.

4 Q. In this paragraph here where you talk about
5 deleting -- configuring your browser to delete your 15:33:19
6 cookies every time you close it, you refer to small
7 surveillances. What did you mean by that?

8 A. I need to look at it.

9 I think what I mean is temporally small. So
10 imagine I'm deleting my cookies -- I'm going to make this 15:33:38
11 up -- every four hours. So each block that that cookie
12 knows is a four-hour block. I meaning of small that way.
13 So four hours, four hours, four hours; right? So it's
14 now harder to join those three separate units.

15 Q. So the surveillance -- surveillances would be 15:33:59
16 the websites you visited in your other activity online?

17 A. Yes.

18 Q. And they're small because they're going to be
19 limited from the time you -- or to the time between when
20 you start the session and the time you delete the 15:34:18
21 cookies; is that what you're saying?

22 A. Yeah, that's correct. And remember, this is
23 also written in 2014. I think we're a lot less
24 sophisticated on what else different companies could do,
25 certainly what Google and other companies, also. 15:34:32

1 Q. And you understand that this is how Incognito
2 mode and other private browsing modes work; right? That
3 they delete cookies when you close the browser?

4 A. Yes.

5 Q. And therefore, they do provide a measure of 15:34:54
6 privacy; correct?

7 A. I believe I've said that, yes.

8 Q. Paragraph 99. You use the term "eavesdroppers"
9 there. Do you see that?

10 A. Yes. 15:35:32

11 Q. And do you think that's a fair characterization
12 of companies that provide these web services, given that
13 they're only there because the websites want them to be?

14 A. Which web services are you referring to?

15 Q. Well, for example, Google Analytics and Google 15:35:46
16 Ad Manager.

17 A. I think it is in the same way to say
18 surveillance is -- on the internet. Someone can eaves-
19 -- they are. Yes. I mean, in this, I'm -- yeah, I do
20 think it is a -- a fair characterization. 15:36:03

21 Q. Okay. Well, you would agree that the reported
22 eavesdroppers are only there because the websites want
23 them to be; right?

24 A. In the case of Google Analytics, that is true.
25 Actually, in the case of a lot of the trackers that is 15:36:20

1 true, yes.

2 Q. In fact, any Google service that exists on a
3 website is only there because the website wants it to be
4 there; right?

5 A. I don't know all of the Google services. So if 15:36:31
6 you find me one that isn't, I wouldn't be shocked.

7 Q. Fair -- fair point.

8 With respect to the services that are at issue
9 in this case, those cases, Google's analytics and
10 advertising services are only there because the website 15:36:47
11 wants them to be there; correct?

12 A. Yes, yes.

13 Q. Do you agree that a private browsing mode
14 session could be limited to just a single website?

15 A. Yes. 15:37:52

16 Q. In paragraph -- if you go to paragraph 201 of
17 your report.

18 A. Uh-huh.

19 Q. Okay. It says: "While Google can present
20 cookie tracking as a necessary part of the internet, this 15:39:13
21 is simply not the case. In fact, there exists a widely
22 proposed protocol (supported in every major browser,
23 including Chrome) called 'Do Not Track.' This is a
24 signal that can be sent in a HTTP header to a website,
25 asking that the site to not track this user, browser, or 15:39:29

Page 140

1 request. Chrome has this feature, which is buried within
2 the settings menu, and is turned off by default. Any
3 sensible 'incognito' or truly 'private' mode would enable
4 this feature by default."

5 Do you see that? 15:39:48

6 A. I do.

7 Q. Okay. Do any other private browsing modes --
8 well, let me make that more limited.

9 Do any of the private browsing modes that are at
10 issue in this case enable Do Not Track by default? 15:39:59

11 A. I don't know, but I do say that Brave prompts
12 users to turn it on. So that's not a default, but it
13 is -- it's a pattern that will incent users to turn it
14 on.

15 Q. Is Brave at issue in this case? Do you know 15:40:22
16 which browsers other than Incognito are -- sorry, which
17 browsers other than Chrome are at issue in this case?

18 A. I do, but I always get them wrong and look it
19 up.

20 Q. That makes two of us. 15:40:34

21 A. Yeah. So look it up if we need it.

22 Q. Yeah, I think it's Safari and Edge.

23 A. Safari and -- not Firefox -- and Edge. I think
24 that's right. Edge is the Microsoft one.

25 Q. Okay. Do you know whether Safari or Microsoft 15:40:51

1 has to be.

2 Q. Okay. In 241, it looks like you subjected
3 the -- these various Google documents to a Flesch Reading
4 Ease score or a Reading Ease test, I guess?

5 A. Yes. 16:00:55

6 Q. Okay. Do you have any expertise in readability?

7 A. I do not. So I used the test.

8 Q. Okay. Have you ever used these tests before?

9 A. I have. Not often, but I have run a writing of
10 mine through it occasionally just to see. 16:01:16

11 Q. Okay. And your results showed that generally
12 people with a high school diploma should be able to
13 understand these various Google disclosures; right?

14 A. You know, what it says is the education needed.
15 So it gives a minimum that needed. You know, you said if 16:01:39
16 someone above that should be able to. That's going to
17 have a lot of other elements besides just readability.

18 Q. Okay. Section 10.2, paragraph 243. Let me know
19 when you're there.

20 A. I'm there. 16:02:18

21 Q. Okay. You opine that Google promises users
22 control.

23 Do you see that?

24 A. Yes.

25 Q. Is it your opinion that Google does not deliver 16:02:24

1 on that promise?

2 A. Yeah.

3 Q. How so?

4 Well, actually, strike that. Let me ask you

5 another question first. 16:02:41

6 Are you saying that Google offers users no
7 control?

8 A. No.

9 Q. Google does offer users some control; correct?

10 A. Yes. 16:02:51

11 Q. There are various settings that Google offers
12 across its services that give users control; correct?

13 A. Yes.

14 Q. The word "control" can mean a lot of different

15 things depending on context; correct? 16:03:17

16 A. Yes.

17 Q. Control is a measure of degree; right?

18 A. Yes.

19 Q. You can have some control or you can have total

20 control? 16:03:29

21 A. Yes.

22 Q. Do you agree that by providing a cookie blocker

23 option in Chrome, Google provides users some control?

24 A. Yes.

25 Q. Do you agree that by allowing users to delete 16:03:41

Page 153

1 data associated with their account in My Activity, users
2 provides -- sorry, Google provides users control?

3 A. You went from some control to control. Do you
4 mean to do that?

5 Q. No. That got all muddled. 16:03:56

6 Do you agree that by allowing users to delete
7 data associated with their account in My Activity, Google
8 provides users control?

9 MR. CROSBY: Object to the form.

10 THE WITNESS: Google provides users some control 16:04:08

11 by doing that. And that's a tough one because we're
12 pretty sure that Google doesn't allow you to delete the
13 backups. You know, there are lots of cases in other
14 companies where you delete your data and you change your
15 mind, it comes back. So when deleted data is truly data 16:04:24
16 is an open question.

17 Q. BY MR. BROOME: Do you agree that by providing a
18 browser mode that allows the user to be either signed in
19 or signed out, Google provides users some control?

20 A. Yes. 16:04:45

21 Q. Do you agree that by providing a browser mode
22 that prevents the sharing of existing cookies with
23 websites, Google provides the user with some control?

24 A. And I'm taking it as read that Google actually
25 does this; right? Because I have no direct knowledge. 16:04:59

1 Q. Yes.

2 A. And this would be in Chrome?

3 Q. Yes.

4 A. Yes, that it gives users some control.

5 Q. And do you agree that a browser mode that 16:05:09
6 deletes cookies automatically when you close it provides
7 users some control?

8 A. Yes.

9 MR. BROOME: Why don't we take a short break.
10 I'm just going -- we're sort of at the point -- well, 16:05:50
11 let's go off the record for a second, if that's okay.

12 MR. CROSBY: Sure.

13 THE VIDEOGRAPHER: Going off the record at
14 4:06 p.m.

15 (Recess.) 16:06:33

16 THE VIDEOGRAPHER: We are back on the record at
17 4:26 p.m.

18 Q. BY MR. BROOME: Mr. Schneier, can you please
19 turn to paragraph 279 of your report.

20 A. Yeah, let me turn the light on here. It will be 16:26:41
21 a little better for me.

22 Q. Okay.

23 A. I'm here.

24 Q. Okay. Paragraph 279, you say: Google's Privacy
25 Policy throughout the class period promised that users 16:27:04

Page 155

1 had control over Google's collection of their information
2 with users being able to exercise control by using
3 private browsing."

4 Do you see that?

5 A. I do. 16:27:14

6 Q. And then you cite the various Google privacy
7 policies in effect during the class period.

8 Do you see that?

9 A. I do.

10 Q. Okay. And that begins in June -- looks like the 16:27:23
11 first one you cite there is June 2016?

12 A. Yes.

13 Q. But you know that Google did not mention
14 Incognito mode or private browsing in the Privacy Policy
15 until 2018; right? 16:27:41

16 A. Yes.

17 Q. So why did you say that Google's Privacy Policy
18 throughout the class period promised users had control
19 over Google's collection of their information, with users
20 able to exercise control by using private browsing? Was 16:27:57
21 that a mistake?

22 A. That's interesting. You're saying -- and I
23 remember that; I'm not going to check. We'll say that
24 you say it's right -- that in those older ones, they
25 don't mention private browsing at all. 16:28:18

Page 156

1 for information about ways to deal with or exit from an
2 abusive relationship. As discussed previously, abusers
3 often employ technological knowledge and means to control
4 their victims, including inspecting a shared computer or
5 their victim's computer or phone to spy on their online 16:46:23
6 activity. If detected by a tech-savvy abuser, searches
7 and the subsequent browsing activities tied to the
8 following searches could lead to domestic violence," and
9 you list a number of searches people might have run.

10 Do you see that? 16:46:39

11 A. I do.

12 Q. Okay. How tech savvy would one need to be to
13 figure out somebody's Incognito searches, assuming the
14 user closes their Incognito sessions when they're done?

15 A. So I haven't done forensic work in Google Chrome 16:46:54
16 and Incognito so I cannot answer that question.

17 Q. Okay. I mean, sitting here today, are you aware
18 of any way that somebody outside of Google could
19 determine somebody's Incognito browsing or searches?

20 A. Off the top of my head, I can think of a key 16:47:14
21 logger as one.

22 Q. Okay. That's a third-party software?

23 A. Software or hardware. You can use them both
24 ways.

25 Q. That would record all of the key strokes on the 16:47:29

1 device; right?

2 A. Yes.

3 Q. Okay. Regardless of whether they're in
4 Incognito or not; right?

5 A. Yes. 16:47:37

6 Q. Okay. So let's assuming -- let's assume the
7 abuser is not particularly tech savvy. Incognito should
8 prevent the abuser from finding -- from identifying the
9 searches that somebody ran in Incognito?

10 A. If it doesn't, we have some serious problems 16:47:56
11 here. So let's assume it does.

12 Q. Okay.

13 MR. CROSBY: I'm sorry, I was on mute. I
14 objected to the form of the question.

15 Q. BY MR. BROOME: And I think we sort of touched 16:48:13
16 on this earlier, but if one engaged in a fingerprinting
17 analysis to identify this device as one that is engaged
18 in private browsing, and then emailed the owner of that
19 device, in this example, the abusive spouse, that it was
20 used for private browsing, that might alert the abusive 16:48:33
21 spouse that his wife had been doing research in private
22 browsing mode to conceal something from him; right?

23 A. Yes.

24 Q. And that's a really legitimate concern; right?

25 A. I think it is, yes. 16:48:48

1 Q. Do you have an opinion as to whether the
2 branding and marketing messages of other private browsing
3 modes is misleading? Other meaning other than Incognito
4 mode.

5 A. I did not look at them in relation to this case. 16:49:05
6 And that's not something I pay attention to. So right
7 now, I don't.

8 Q. You're a Firefox user; right?

9 A. I am.

10 Q. Have you ever used Edge? 16:49:15

11 A. I have never used Edge.

12 Q. In Firefox, do you ever use Incognito or their
13 equivalent private browsing mode?

14 A. I do not.

15 Q. And why is that? 16:49:28

16 A. Can you say asked and answered?

17 Q. Is it because you don't have any shared
18 computers?

19 A. That's right.

20 Q. Okay. Would you turn to paragraph 311. 16:49:37

21 A. Uh-huh.

22 Q. You write: "In May 2019, Google's CEO Sundar
23 Pichai wrote an op-ed in The New York Times in which he
24 described Incognito mode as a 'popular feature in Chrome
25 that lets you browse the web without linking any activity 16:50:31

Page 171

1 MR. CROSBY: Object to the form.

2 THE WITNESS: I am not an attorney.

3 Q. BY MR. BROOME: You're not an attorney and you
4 are not evaluating Google's disclosures against any legal
5 standard; correct? 17:14:18

6 A. That is correct. But you listed a few
7 potentials in -- previously. So not by any of those
8 statutes.

9 Q. You referenced the generally accepted practices
10 of your industry; is that right? 17:14:43

11 A. Okay. Okay.

12 Q. And where do those -- can someone -- are those
13 like in a form that someone can actually look at?

14 A. They are not formalized, no.

15 Q. Okay. Can you turn to paragraph 266, please. 17:14:57

16 A. I'm there.

17 Q. You write: "In June 2017, Apple announced its
18 Intelligent Tracking Protection, a feature for Safari
19 that limited the use of cookies for cross-site tracking
20 by blocking third-party cookies after 24 hours of 17:15:54
21 inactivity and purging all cookies after 30 days."

22 Do you see that?

23 A. I do.

24 Q. And does that mean that information sent to
25 Google from non-Google websites using its services would 17:16:13

Page 180

1 be different from a user in Safari after June 2017 than
2 it would be from a user in Chrome?

3 MR. CROSBY: Object to the form.

4 THE WITNESS: I don't know. I actually don't
5 know enough about Chrome right now to answer that. 17:16:32

6 Q. BY MR. BROOME: Okay. If you go to 267. You
7 wrote: "In June 2019, Mozilla rolled out its Enhanced
8 Tracking Prevention feature for Firefox, which blocked by
9 default cookies from known third-party trackers when a
10 user downloaded the Firefox browser." 17:17:24

11 Do you see that?

12 A. I do.

13 Q. Does that block by default cookies from Google?

14 A. So I don't know. Google plays this game about
15 cookies. They call their third-party cookies first-party 17:17:35
16 cookies, and I actually couldn't tell you right now what
17 Firefox does about that.

18 Q. Okay. If you turn to Section 8.3, which starts
19 at paragraph 185.

20 A. Okay. 17:18:35

21 Q. There's a section there says: "Google Uses
22 Cookie Matching to Help Identify Users in Real-Time
23 Bidding."

24 Do you have any expertise in Google's real-time
25 bidding platform? 17:18:46

1 A. Define "expertise."

2 Q. Well, what experience do you have studying
3 Google's real-time bidding platform?

4 A. I have studied it.

5 Q. In connection with this case? 17:18:59

6 A. In connection with this case, yes. I knew about
7 it generally beforehand, but I learned a lot for this
8 case.

9 Q. Okay. And so is the testimony in this case just
10 based off of information you learned -- in this Section 17:19:12
11 8.3 -- let me start again.

12 Is the testimony that you offer in this Section
13 8.3 based on your review of Google's documents?

14 MR. CROSBY: Object to the form.

15 THE WITNESS: It is certainly -- you didn't say 17:19:37
16 based solely on. So I will say yes, this is based on me
17 reading and understanding Google's documents of how these
18 systems work.

19 Q. BY MR. BROOME: Okay. Is this section based --
20 I see there's an article you cite from Brad Bender at 17:20:12
21 footnote 208, and an article you cite at footnote 200.
22 Oh, that's in the previous section.

23 So aside from the article from Brad Bender, what
24 else is this section based on?

25 Let me start again. 17:20:28

1 STATE OF CALIFORNIA) ss:

2 COUNTY OF MARIN)

3
4 I, LESLIE ROCKWOOD ROSAS, RPR, CSR NO. 3462, do
5 hereby certify:

6 That the foregoing deposition testimony was
7 taken before me at the time and place therein set forth
8 and at which time the witness was administered the oath;

9 That testimony of the witness and all objections
10 made by counsel at the time of the examination were
11 recorded stenographically by me, and were thereafter
12 transcribed under my direction and supervision, and that
13 the foregoing pages contain a full, true and accurate
14 record of all proceedings and testimony to the best of my
15 skill and ability.

16 I further certify that I am neither counsel for
17 any party to said action, nor am I related to any party
18 to said action, nor am I in any way interested in the
19 outcome thereof.

20 IN WITNESS WHEREOF, I have subscribed my name
21 this 19th day of July, 2022.

22
23
24 

25 LESLIE ROCKWOOD ROSAS, RPR, CSR NO. 3462

EXHIBIT 60

“Privacy threats in intimate relationships” Research Paper (Schneier Ex. 7)

**Exhibit
0007**

7/18/2022

Bruce Schneier

Research paper

Privacy threats in intimate relationships

Karen Levy ^{1,2,*} and **Bruce Schneier**^{3,4}

¹Department of Information Science, Cornell University; ²Cornell Law School, Ithaca, NY, USA; ³Berkman Klein Center for Internet and Society, Harvard University; and ⁴Belfer Center for Science and International Affairs, Harvard Kennedy School, Cambridge, MA, USA

*Corresponding address: Department of Information Science, Cornell University, Ithaca, NY, USA. Tel: +1 317-682-8287. Email: karen.levy@cornell.edu

Received 11 December 2018; revised 10 March 2020; accepted 8 April 2020

Abstract

This article provides an overview of *intimate threats*: a class of privacy threats that can arise within our families, romantic partnerships, close friendships, and caregiving relationships. Many common assumptions about privacy are upended in the context of these relationships, and many otherwise effective protective measures fail when applied to intimate threats. Those closest to us know the answers to our secret questions, have access to our devices, and can exercise coercive power over us. We survey a range of intimate relationships and describe their common features. Based on these features, we explore implications for both technical privacy design and policy, and offer design recommendations for ameliorating intimate privacy risks.

Keywords: intimacy; family; abuse; children; relationships; privacy

Introduction

The information security community tends to focus its attention on a canonical set of attackers: companies tracking our activities online, criminals looking to steal our data, government agencies surveilling us to gather information, and hackers out for the “lulz.” But a huge number of threats are much more quotidian, performed by much less powerful and less technically savvy actors with very different motives and resources. These attackers know their victims well, and have much greater access to their information, devices, and lives in general. We call these attacks *intimate threats*, in which one member of an intimate relationship—a spouse, a parent, a child, or a friend, for example—violates the privacy of the other.

Intimate threats have garnered little explicit attention from the security and privacy communities and from system designers. For example, a recent review of 40 academic analyses of smart home security anticipated 29 different threat actors and 100 different types of threats—but the threat model of a domestic abuser was almost entirely absent across the literature [1]. We argue that these threats ought to be treated as a primary concern.

Intimate threats represent the way a huge number of people actually experience insecurity and privacy invasions every day. These threats are so common as to be treated as routine and often overlooked, but they are experienced much more frequently—and

often with greater direct impact on victims’ lives—than many of the threats that dominate the security discussion. And they disproportionately impact society’s most vulnerable and least powerful people, often including women, children, the elderly, and the physically or cognitively impaired. Though these threats are, by their nature, difficult to definitively quantify, the indicators we have suggest the scope and scale of intimate threats. In one survey, 31% of participants admitted to snooping through another person’s phone without permission in the past year [2]. A recent Pew survey found that the majority of parents check their teenagers’ browsing histories and social media profiles. Forty-eight percent looked through phone records and text messages, and 16% tracked teens’ locations via their cell phones; half reported knowing the password to their teenager’s email account [3]. An NPR survey of US domestic violence shelters indicated that 85% of shelters had worked with survivors who had been stalked using GPS devices, and that 75% had helped survivors who had been subject to eavesdropping using remote tools [4]. A survey in the UK found that 85% of abuse survivors reported being subject to online abuse as part of a pattern of their abuse more generally [5]. Taken together, figures like these suggest that privacy invasions by intimates are pervasive and deserving of focused study.

In addition to being important on their own, intimate threats can be precursors to more traditional forms of privacy and security

threat. Intimate privacy invasions can result in the destruction of valuable or personal data, like financial records or family photographs. They can be the first step in financial fraud. In abusive partner situations, they can be a precursor to physical, emotional, and sexual abuse [6, 7]. And even well-intentioned intimate monitoring can create a slippery slope of acceptability, inuring users to accepting surveillance as a mode of social control in other contexts [8].

Finally, a more systematic consideration of intimate threats stands to benefit socio-technical security research as a field. These threats pose difficult technical challenges, made more complex by the social relationships in which they are embedded—which are marked by different degrees of authority and autonomy within relationships. They present a mixture of motivations for privacy invasion, often including beneficent motivations like protection and care. They pose novel and interesting questions about privacy boundaries: what degree of monitoring is socially and normatively acceptable in intimate relationships, and how system designers might best accommodate divergent and dynamic preferences. Directly addressing these issues extends the field and provides designers with an opportunity to better address real-world situations. In this way, our work fits into a broader scheme of research that prioritizes the sociotechnical and behavioral dimensions of security and privacy across different social contexts, and which recognizes the critical importance of interdisciplinary approaches to developing solutions [9–11].

Our goals in this article are twofold. While emerging research has begun to examine privacy threats within particular intimate relationships, we are aware of no work that synthesizes common characteristics or design considerations of these threats from across intimate contexts. Our first goal, then, is to describe intimate threats as a *class* of privacy problems, drawing out the features that characterize the category. Many of these features involve the violation of implicit assumptions that hold more readily in other contexts of privacy threat. A better understanding of these common features is required to more adequately protect against intimate threats.

Our second goal is to articulate a set of design considerations that is cognizant of intimate threats. These are difficult problems, and our intention is not to prescribe an exhaustive “checklist” that will immunize a technological system against all intimate threats. Rather, we aim to supply researchers, designers, and policymakers with a conceptual toolkit for recognizing and taking these threats seriously, as well as a critical assessment of the design trade-offs they entail.

Monitoring in intimate relationships

An extensive amount of monitoring routinely occurs across many types of intimate relations, from romantic partners, to parent–child relationships, to roommates, to caregivers. Family members, roommates, and close friends often know each other’s whereabouts and with whom the other spends time. Long-term partners often share bank accounts and keep track of each other’s financial activities. Roommates answer each other’s phone calls—regularly on a shared home landline, and sometimes on each other’s cell phones. People living in the same household may share computers, phones, and other connected devices. Intimates might share social media and

email accounts [12]—and even if they have separate accounts, they may know one another’s passwords [13–15]. Depending on how their devices and accounts are configured, they may have access (intentionally or not) to each other’s files, browsing history, and more. Smart home devices are shared by necessity, and give family members access to a great deal of information about each other’s whereabouts and activities.

People may willingly share access to accounts and devices for a number of benign and useful social, cultural, and economic reasons [12, 16]. They may do so as a practical component of household management and communication [16], or because it is cost-effective to pool resources within the family. They may do so to establish and demonstrate intimacy [17] or trust [18, 19] in a partner, or as a condition of access. Personal preferences and cultural expectations further complicate matters.¹ Some partners may desire not only to monitor an intimate partner, but also to *be* monitored, for convenience (e.g., “I like my partner to know when I’m on my way home so we can make evening plans”) [21], for safety (e.g., to inform trusted contacts of one’s location to provide a “virtual escort” while walking alone) [22], or for other reasons. In other contexts, there may be social or cultural assumptions of family access and sharing, often along gendered lines [23, 24]. (In fact, some industry groups have gone so far as to say that because devices are often shared within households and families, device identifiers should not be considered “personally identifying” under privacy laws [25].)

Much of this access is not necessarily nefarious, intentional, or even unwelcome. In many cases, it simply reflects how people choose to organize their households and relationships, and the role of digital technologies within them. But intimacy also presents distinct informational vulnerabilities. Those who sit in intimate relation to us hold unique resources that can be brought to bear to gain access to our data or devices. Intimates may marshal those resources for a variety of purposes, up to and including abuse. And even in non-abusive situations, members of close relationships may find it almost impossible to protect their own privacy interests against one another, thanks in large part to assumptions built into common technical infrastructures.

Intimate monitoring brings unique ethical complications to the fore [26, 27]. In most privacy contexts, there’s little question about the impropriety of unauthorized access. But in intimate settings, some unauthorized access would strike many as warranted—or even required—as a component of a duty of care [28]. Family members have a moral, economic, and often legal responsibility to take care of one another and ensure each other’s safety, security, and well-being; they often leverage data-gathering technologies in doing so. Indeed, there are many cases in which it seems both normatively and practically unfathomable that intimates *not* be privy to one another’s data. For instance, medical and educational data from minor children must be made available to their parents—who bear responsibility for children’s care in both respects—and applicable laws specifically provide that parents should have such access in many cases.²

The fact that intimate information-sharing is widespread and often accepted should not lead us to be unreflective about very real privacy threats within intimate relationships. Rather, it makes it all the more important to consider how intimate privacy threats occur,

1 For an example of such monitoring that many would find abhorrent, see this about women in Saudi Arabia [20].

2 For example, in the USA, the Family Educational Rights and Privacy Act (FERPA) gives parents access to their children’s educational records up until age 18; even after age 18, schools may *choose* to disclose certain

records to parents in some cases (e.g., in cases of an emergency, or if the child is claimed as a dependent) [29]. Indeed, the tension between parental notification and a child’s privacy can be a difficult one for institutions to navigate, as when colleges do not notify parents of children’s psychological difficulties [30].

when they are unwelcome, and how to reason about them conceptually. The line between *watching* and *watching over* is a blurry one. Even in close, loving, and generally functional relationships, privacy invasions can at times be cause for conflict and anxiety [31]. There are no bright-line rules for determining when duties of care and protection override privacy interests in intimate relationships, nor for whether intimate monitoring crosses a line of appropriateness. Intentions can be intertwined in the same monitoring relationship (“I want to see when my wife is on her way home so I can start dinner, but I also want to make sure she isn’t going near X’s house”) and can change over time and circumstance. Variable preferences and norms about data sharing in intimate relationships present special challenges to designing privacy into these systems; they are not a reason to ignore these threats.

Victims of intimate privacy threat typically lack legal recourse. Judges and legislators are generally loath to intervene too strongly in what is often considered the “sacred” space of the intimate sphere, tending to protect the privacy of families vis-à-vis the state rather than privacy *within* the family [32–34]. This is even more true in patriarchal societies that grant men in the family stronger rights and freedoms (e.g., Turkey [35]); in Saudi Arabia, for example, where all women are required to have a male guardian, a government-run website permits men to grant or deny women under their guardianship the right to travel, and to set up notifications so that they receive a text message should a woman in their family try to get on an airplane [20]. In the USA, some legal protections do exist against the most egregious abuses—protections against nonconsensual pornography [36, 37], no-contact orders following episodes of intimate partner violence, and so on—but the law has generally had trouble keeping up with the challenges of digitally mediated intimate abuse [38–40]. And in the contexts of intimate privacy violations that do *not* rise to the level of abuse (like child tracking), the law offers virtually no remedy, often due to the assumption that a caretaker’s preferences are aligned with the interests of the person being monitored [41, 42].

We conceive of intimate privacy threats broadly in this article. Though we use the words “attack,” “attacker,” and “victim” to characterize aspects of these threats, these may sometimes seem to describe normal—even accidental—interactions between people with no specific malicious motivations toward one another. Our use of these words aligns our inquiry with the dominant discourse in security discussions and threat modeling, in which the terms merely indicate who is attacking and defending a system and do not have any moral or pejorative connotations [43, 44]. Many of the privacy invasions we discuss in this article are quite casual; attackers need not necessarily act with bad intent, nor plan to use the information gleaned for abusive or illegal purposes. It may be helpful to conceptualize some intimate threats as *involuntary disclosure* of a victim’s information to an attacker, at times even without the attacker having a specific intent to obtain that information.

Types of intimate attackers and victims

All intimate relationships—and the privacy practices and expectations within them—are different. We characterize here some of the most prevalent relationships that may give rise to privacy threats and summarize some of the existing research that examines each context. The scope of intimate relationships with which we concern ourselves follows Hasday’s definition of intimates as including “dates, sexual and/or romantic partners, and family members such as spouses, parents, and children” [34, p. 6]; we consider in-family

caregivers (e.g., nannies) and friends/roommates, as well. (Hasday argues that no “ideal and unassailable definition of intimacy exists”; like her, we adopt a “working definition” based on common understanding of the term, without firmly fixed boundaries.)

Intimate partners

Privacy threats commonly emerge in romantic partnerships. Significant others may invade one another’s privacy for a variety of reasons, ranging from casual to abusive, over the course of a romantic relationship.

Perhaps the most alarming example of privacy invasion in a romantic relationship is in the case of intimate partner violence and abuse. Nearly one in three women and one in six men will experience abuse at some point over the course of their lives [45]. In an increasing proportion of these cases, abusers use digital tools to perpetuate abuse and control over the victim: tracking a victim’s location, monitoring their communications, harassing and threatening them, and otherwise surveilling or restricting their activities [6, 7, 46, 47]. These behaviors commonly begin in early dating relationships, and often accompany or prefigure other forms of abuse [47].

Abusers have used a variety of digital tools to spy on or exert control over their victims, most of which require minimal technical sophistication. Some abusers use off-the-shelf spyware apps, which are commonly available online and on app stores; these applications run in the background on victims’ mobile phones and computers, reporting their activities back to an abuser surreptitiously [48, 49].

Abusers also make use of a number of commonplace digital tools for abusive purposes. Smart home and IoT technologies such as remote web-enabled cameras, home appliances, thermostats, speakers, and other home sensors can be used by abusers to stalk, harass, and monitor victims and their activities [50, 51]. One company markets a mattress that detects and reports “suspicious movements in the bed” [52].

Even more commonly, abusers rely on the ease of access facilitated by knowledge of the victim’s passwords (sometimes shared under threat, other times voluntarily as a sign of trust [19, 53]), answers to security questions, and other authentication mechanisms. Sometimes authentication can be bypassed altogether—for example, the abuser may be able to keep track of the victim’s communications because they share a family plan for cellular service, or via browser history on a shared computer [46, 54]. Child-tracking apps and employee-tracking apps are easily repurposed for surreptitiously monitoring intimate partners, and there are some indications that their developers are aware of and condone such use [48]. Social media also presents an easy route toward tracking, as many platforms offer up information like a user’s location while posting or an indicator of whether the user is actively on the site. Many shared services record usage history, which can be used to monitor a partner.

Privacy invasions in the context of intimate partner abuse are especially egregious and provide a noncontroversial (and important) rallying point for taking intimate threats seriously. But privacy invasions between romantic partners aren’t restricted to these extreme cases, and we ought to take intimate privacy seriously even in the *absence* of abusive circumstances. For instance, many partners collect data about one another routinely and harmlessly in the context of courtship (e.g., “Facebook stalking” a prospective date), sexual relationships, relationship management, or as a way to “gamify” aspects of romantic love [17, 32, 55, 56]. Many fertility- and pregnancy-focused apps grant partners a degree of surveillance over one another (most commonly, male partners over female partners)

[57]. For example, one service prompts a man to offer his pregnant partner a glass of water if his version of the app suggests she may be dehydrated [32]. Several period trackers issue “alerts” to men when their partners are menstruating; one even provides the capability to track several women’s periods at once, tracking each with a separate password “so when you punch it in, it only looks like you’re tracking her” [32].

In other cases, partners may monitor each other when they doubt the responsibility of each other’s behavior; for example, parents who travel commonly report “checking in” on their partner via web-enabled baby monitor to see if the baby has been put to bed properly. Soberlink, a facial-recognition-augmented breathalyzer, is sometimes ordered by courts as a condition of visitation when one parent has a history of alcoholism. If the alcoholic parent (the “monitored client”) fails to breathe clean, a text is sent to the other partner (the “concerned party”) as an indication that it is not safe for the children to visit that day [58].

Additionally, partners are sometimes “caught” being unfaithful via monitoring unbeknownst to them. For example, the governor of Alabama’s furtive texts to his paramour were being synced to his wife’s iPad [59]. In another story, an Internet-connected smart scale sent the weight measurement of someone’s illicit lover to his partner’s phone [60]. In these cases, there’s a tendency to view the unfaithful partner as a villain who had it coming, rather than as a person whose privacy preferences were disrespected by poor design [12]. But from a privacy-protective perspective, we ought to be agnostic as to the nature of the behavior or content detected, and be fundamentally concerned with how technology may facilitate involuntary information-sharing.

Parents and minor children

Parents routinely monitor their children in the course of caring for them, from infancy (and even beforehand, *in utero*) through adolescence [61]. Some degree of parental monitoring is essential to ensure children’s safety and well-being. Indeed, as parents’ lives become busier, parents are often lambasted or punished for giving children significant autonomy—a burden disproportionately felt by women of color and at the lower end of the socioeconomic scale. Mothers have been charged with child abuse and endangerment for letting their children wait in the car or play in a park unsupervised while they run errands or attend job interviews [62]. This risk of being perceived as a neglectful parent, combined with a lack of social or governmental infrastructure for providing childcare resources, provides an incentive for parents to digitally track their children. Fear-based marketing exacerbates this impetus by cultivating a sense of generalized anxiety in parents—one that can most readily be ameliorated through monitoring [28].

Monitoring often continues well into the teenage years, as different risks become salient to parents. Many parents know the passwords of their children’s accounts and regularly check on their online activities, perhaps as a condition of use [63]. Parents have been held responsible for their children’s illegal file downloads or sexting behavior, creating legal obligations that result from *failing to supervise* teens’ online activity [64, 65]. As discussed earlier, a Pew survey found that most parents engaged in some form of monitoring of teens’ browsing histories and social media profiles, and half had their teens’ email passwords [3]. A separate study found that parents with home-entryway surveillance systems routinely monitor the comings and goings of their teenage children [66]. Parental monitoring software is commonly marketed to aid parents in many of these activities [28, 48]. On the more extreme end of the

spectrum, parents may purchase tamperproof ankle bracelets and GPS monitoring services for “high-risk” teens [67].

The balance between essential caretaking and privacy invasion can be unclear [68, 69]. On one hand, parents have a duty to supervise their children, and implicit authority to place limits on their activities and communications. Parental control apps like Google’s Family Link allow parents to view children’s online activity and device location, under the advertised purpose of letting parents “set digital ground rules to help guide” their children online [70]. On the other hand, some have raised concerns that the normalization of parental surveillance quashes developmentally important childhood freedoms and trust-building—particularly as children get older—as well as children’s freedom of expression and access to information [71–73]. Child monitoring apps like Bark, for example, alert parents when its algorithms detect profanity, sexting, or indicators of depression in a child’s social media or text exchanges [74]. Toys like Hello Barbie record children’s conversations with the doll and, unbeknownst to them, email the audio files to their parents [75]. A recent Google patent proposes that its smart home system can “infer mischief” if its audio and motion sensors detect that children are occupying a room—but are *too quiet* [76]. All have prompted scrutiny from privacy researchers.

Parents may also violate their children’s privacy for reasons wholly unrelated to caretaking. Parents may fraudulently use a child’s identity for purposes of opening lines of credit and other accounts. Though the prevalence of such fraud is difficult to establish empirically, research suggests that when a child’s identity is stolen, their parents are the most likely perpetrators [77].

In other contexts, the tables may be turned: young children may be privacy threats to their parents. Children are often the savviest technology consumers in their own families, and often act as “sysadmins” within them; in the course of this role, they may incidentally or deliberately gain access to detailed digital information about their parents [78]. And children may have motivations to use this information for personal gain—stealing money from parents’ bank accounts, using parents’ passwords to gain access to proscribed media, using their credit cards, and the like. Notably, some authentication mechanisms may be less effective for one’s children for reasons having to do with biological similarity. The chance of a random person unlocking someone else’s Apple’s Face ID—used for authentication on the iPhone X—is only one in one million, according to Apple’s whitepaper on the topic—but “[t]he probability of a false match is different for twins and siblings that look like you as well as among children under the age of 13, because their distinct facial features may not have fully developed” [79]. Indeed, cases of children unlocking their parents’ iPhones with the children’s own faces have been reported in the media [80].

Adult children and elderly parents

As the world’s population ages, a growing number of families find themselves charged with caring for elderly relatives [42]. The corresponding demand for care—along with meager state resource allocations to support such care—leave many families dependent on remote monitoring technologies to make these burdens tractable.

Some families use video monitoring equipment, colloquially known as “granny cams,” to keep tabs on the safety and well-being of elderly relatives [42, 81]. In nursing homes and assisted living facilities, families often deploy web-enabled cameras in residents’ rooms. The use of these cameras is often motivated by concern about the resident being abused or neglected at the hands of staff or another resident [42]. Roughly 10% of elderly adults (across all care

settings) are estimated to be victims of physical, sexual, or psychological abuse, neglect, or financial exploitation [82]. And nursing home residents are considered to be among the most vulnerable: approximately half of nursing home residents suffer from Alzheimer's disease or related dementias [83], and abuse is believed to be significantly underreported among populations afflicted with these conditions [84].

But familial monitoring of elderly relatives presents its own set of privacy threats. The same cognitive impairments that make nursing home residents susceptible to abuse may also make them unable to give meaningful consent to being monitored by a relative. When this is the case, the capacity for consent typically defaults to the resident's "representative," who is most commonly the family member who is instigating monitoring in the first place [42]. A huge variety of intimate activities—including bathing, dressing, medical care, sexual activity, and personal conversations—takes place in residents' rooms. Since 2001, seven states have implemented statutes and regulations governing families' use of cameras there—but the majority of such legislation does not account for inconsistent privacy preferences between the resident and the family representative (nor do they account for potential abuse situations within the familial relationship). Instead, they tend to treat the family member's decisions as a precise extension of the interests of the elderly resident [42].

Alternatively, families may monitor an elderly relative to support "aging in place"—that is, as a condition of permitting the relative to remain in a private home, often alone, rather than moving them to a facility where they would have better access to medical services but might lose desired independence [85]. Cameras are also often used in these contexts, as well as a variety of other technologies that give a family member oversight over the activities of the elderly relative. These commonly include monitoring of health outcomes and behaviors, like adherence to prescriptions (like "smart" pills and pill bottles that notify someone if a family member fails to take medicines on time [86, 87]), safety and mobility issues (like Lifeline systems that detect falls [88]), and a variety of smartphone apps, GPS trackers, and in-home sensor systems that track things like temperature, doors opening and closing, and the presence of visitors [89]. The common denominator among such technologies is a rhetoric of enablement: but for the peace of mind that they ensure, the elderly relative would no longer be able to live independently [90]. As is the case in other intimate relationships, family members' monitoring of elderly relatives is very often motivated by care and a desire to protect. Yet, research suggests that the privacy preferences of monitored relatives often diverge. In one study, adult children of elderly mothers had consistently more favorable views of sensor, camera, and location tracking technologies than their mothers did—but the adult children typically thought they could persuade their mothers to give consent to being monitored [91].

Other caregivers and their charges/patients/dependents

Similar intimate threats arise in the context of paid care work. An increasing amount of intimate care is outsourced to nannies, babysitters, and workers who care for the elderly and infirm. The presence of these workers as intermediaries in care relations introduces further opportunities and incentives for intimate monitoring, as well as additional complexities related to the employment relationship.

These workers may themselves monitor their charges, using the same sorts of tools, and based on the same sorts of motivations, as described above. They may also be the targets of monitoring by their employer (or by a government agency that subsidizes the care)—to ensure that they do their work to a satisfactory level, to allay

concerns that they may steal from the household, and to ensure the safety and health of their charges [92]. This monitoring commonly occurs via nanny cams and distributed surveillance platforms like Nannysightings.com, through which parents can report to one another on caregivers' behaviors [28]. Extensive monitoring can also occur in the context of hiring and screening caregivers: the service Predictim, for instance, analyzed prospective babysitters' social media histories in order to predict their propensity for drug abuse and bullying (before Facebook and Twitter curtailed their access to do so) [93].

Besides being attackers or victims of attacks themselves, paid caretakers can also be used as a justification for more monitoring of the dependent by the person who contracts for their care. For example, the threat of abuse at the hands of nursing home workers is used as a justification for putting elderly residents on cameras monitored by family members (despite the fact that most elder abuse is perpetrated by family members, not care workers), potentially resulting in invasions of the elderly resident's privacy by their family [42, 81]. Similarly, some day-care centers offer web cameras for parents to monitor the type and quality of care their children receive (see, for example, [94]).

Friends

Of course, privacy threats can also arise within friendships. Friends often share intimate details of their lives with each other; in fact, the willingness to reveal private information to one another can be understood as an indicator of trust and closeness in the relation [8]. Friends may be roommates and share common physical space. But as with other sorts of intimate relations, friends can be controlling and retaliatory, and friendships can sour. As such, they can share many of the same characteristics as other intimate relationships.

This class of risk can be further exacerbated by the inexperience and naïveté of youth, and by the transitory nature of friendships and partnerships among teens and tweens [53]. Young people manage, define, and maintain their relationships with one another by differentiating the access they allow to some friends versus others (e.g., allowing some friends—but not others—to know one's location on a "Find My Friends" app) [8].

Common features of intimate threats

Having reviewed various relations in which intimate threats can reside, we turn now to drawing out features that frequently characterize intimate threats across these relational contexts, as described in existing research—many of which set them apart from traditional privacy contexts. Clearly, individual situations will vary; these features will be present and more or less salient in different relationships. We enumerate four such features here, and in the following section describe their implications for policy and design.

Feature 1: Attackers may have multiple motivations—including beneficent ones—often tied to emotion

Attacker motivations in intimate settings are often very different than in other privacy contexts. Although there are certainly instances of intimates stealing money and other things of value from each other, in general, intimate attacks are more likely to be motivated by an attacker seeking knowledge of, and possibly control over, another's behaviors [95]. Sometimes these motivations are premised on positive inclinations like love, caretaking, and perceived protection from internal and external dangers. There may be a strongly held (and legally supported) sense of duty to "look after" intimate

relations, and privacy invasions may be justified as being “for their own good”—particularly when one party is much more vulnerable, like a child, elderly adult, or a family member with reduced physical or cognitive capacity.

In other cases, the motivation may be control for control’s sake, jealousy, or fear. In abusive situations, the motivations may be a desire to cause emotional or even physical harm, retaliation for a perceived wrong, or preventing a victim from seeking help or extrication from the situation [6]. On both ends of the spectrum, emotion plays a strong role in motivating behavior, and advertising often plays on those emotions to market monitoring tools [28].

These emotional motivations mean that normal considerations about whether an attack is “worth it” can fail in the context of intimate relations. Because an attacker may be motivated by a range of factors—ranging from deep love and care to obsession, jealousy, or desire for control, and with a good deal of variation in individual, cultural, and relational preferences—dispassionate, rational cost-benefit analysis of threats and resources is unlikely to be easily applied to intimate threats. One of us (Bruce) remembers that as a child he once brute-forced a combination padlock in his house. A four-digit lock’s 10,000 possible combinations might be enough to keep out a burglar, but fail against a child with unlimited access and nothing better to do that day.

Feature 2: Copresence facilitates device and account access

In many privacy contexts, attackers and victims are assumed, at least implicitly, to occupy physically separate spaces. Physical separation helps to ensure that authentication mechanisms and access credentials create security. This assumption rarely holds true in intimate relationships. We borrow here from Goffman’s use of the term *copresence* to describe situations in which two actors share physical space, facilitating “rich[] information flow” between them such that people “are close enough to be perceived in whatever they are doing” [96, p. 17]. In intimate relationships, people very commonly share physical space—they live together in households, spend time together in public and private settings, and otherwise have high degrees of physical access that facilitates information transmission about each other. Copresence has a number of implications for intimate threats, as we describe here.

Shared physical spaces and proximity among threat, victim, and devices create different vulnerabilities than those threats premised solely on remote digital access [46]. Copresence allows attackers to access a victim’s devices physically, facilitating information visibility (including “over the shoulder” threats such as reading the victim’s screen, watching them enter their passwords, and so on [19, 54, 97]), as well as easier installation of spyware [48]. Many smartphone apps default to presenting messages and communications on the phone’s locked screen, a potential vulnerability if a user’s intimate also has access to the physical device. Other information may be transmitted through jointly used resources in a shared space: a family might have a single shared computer, or a common backup system for all the household’s computers.

Copresence can also reduce the effectiveness of security measures like two-factor authentication. The most common second factor is a smartphone, to which intimate attackers often have at least intermittent access. This can enable them to read any one-time access codes displayed on the locked screen. Copresence can even defeat biometric authentication. In one published incident, a woman unlocked her

husband’s smartphone by placing his sleeping hand on the fingerprint reader [98].

Further, copresence compounds the forms of attack to which a victim is vulnerable. Unlike a physically distant privacy threat whose access to the victim is entirely digital,³ an intimate attacker may expose a victim to other forms of attack, like physical, sexual, emotional, and financial abuse. In some cases, to avoid escalation via other abuse vectors, victims’ advocates may advise a victim *not* to cut off the abuser’s digital access, because doing so can lead to escalation of abuse in other forms [6]. Counterintuitively, then, it may be in the victim’s best interest *not* to immediately ameliorate digital threats, or even to indicate their awareness of them.

Finally, because many people are involved in family relationships, attackers may leverage *other* co-present family members in the service of monitoring another. For example, some survivors of intimate partner abuse report that even if they maintain digital security on their own devices, they can be indirectly monitored via devices controlled by a shared child [46].

Feature 3: Intimate relationships have inherent, dynamic power differentials, backed by explicit or implicit authority

Privacy invasion often accompanies and extends existing vectors of relational power [6]. In many cases, the monitored party has relatively less power in the relation by virtue of age, various forms of dependency (legal, financial, and so on), social norms (men having authority over women in some cultures), or reduced capacity (children, victims of intimate partner violence, elderly adults with dementia, and so on). Intimate threats are very likely the threats most frequently experienced by women, children, and those with disabilities. Power dynamics are also likely to change over time—as the nature of a romantic relationship changes, as children age, as an adult’s cognitive abilities decline and he becomes more dependent on caregivers, and so on.

In many cases of intimate threat, the attacker has decision-making authority over the victim: granted either explicitly by law, or implicitly by the design of the system. Examples of explicit authority are parental rights and responsibilities to access a child’s data or to vicariously consent to monitoring on that child’s behalf [99], or a power of attorney for someone with diminished capacity. This authority may undermine consent-based models of privacy protection: the attacker both has authority to consent on behalf of the victim and *is themselves* a threat to the victim’s privacy, creating a circular (and nonprotective) situation [42]. And some legal frameworks explicitly permit or require data sharing between intimates, like the provision of student data to parents under FERPA, court-ordered alcohol monitoring for parental visitation, or state statutes that permit families to record their loved ones in nursing homes.

An attacker’s authority may also be implicit, based on ownership or expertise. For example, the person who pays for a phone family plan may have the capability of accessing data for all users. Decisions about installation and use of smart home monitoring systems are often driven by the individual in the house with the most expertise and control over the household; Geeng and Roesner [100] found that these decision-makers often didn’t consult other members of the household about these decisions because “they did not consider them equal decision-makers in the home.” Power differentials also imply that coercion can be an important enabler of surveillance

3 But see some complications of this in contexts like swatting.

in intimate relationships. Intimate attackers can coerce or threaten their victims to keep their smartphones unlocked, divulge the passwords to their social media accounts, or enable location tracking [101].

Feature 4: Attackers may bring deep knowledge resources to bear in order to exploit relational vulnerabilities

Privacy infringements in intimate relationships tend to be technically simple. They can involve no more than using readily available device and account interfaces, and attackers need not have great technical skill to execute attacks. But what these attacks lack in technical sophistication, they make up in relational complexity. Simply because of their extensive knowledge of the victim, intimate attackers have deep relational resources that they can leverage in several ways.

Attackers may use intimate knowledge of the victim to gain access to accounts [46]. Much of this information is shared willingly during a relationship and may be shared without consent afterwards. Intimate social knowledge negates certain forms of authentication, which often rely on knowledge of a person's history and social life, under the assumption that attackers would not have access to such information. Some banks authenticate users by asking them for prior addresses; security questions often seek information like a mother's maiden name, a favorite pet or teacher, or a birthday. These types of information, of course, are commonly shared with one's intimates. One of Facebook's backup authentication systems involves showing the person photographs of people and requiring them to accurately identify the ones they know [102]. This is something an intimate partner or family member can do as well. In one recently publicized incident, an Australian woman's ex-boyfriend stalked her with the assistance of an app integrated with her vehicle, which reported her location to him; because he'd helped her purchase the vehicle, he had access to the car's registration information [103].

What's more, thick relational ties complicate amelioration of privacy threats, and create leverage for the attacker. A distant hacker likely has no knowledge of a person's immigration status, health conditions, or personal "dirt" that can be exposed to others online; an intimate associate has access to all of these [6]. Partners may also have access to intimate photos of each other, enabling revenge porn. Control over a spouse's finances, a child's curfew, or an elderly relative's ability to live at home further gives the intimate attacker control; all of these may be conditioned on intimate monitoring, further complicating consent and amelioration.

Implications for policy and design

While many of the threats we have described here are technically unsophisticated, we should not misread this as an indication that they are easy to solve. The social complexity and heterogeneity underlying intimate threats make them very challenging to address technically—which is, perhaps, why they are often ignored by engineers and designers. (Other researchers have pointed out the very low proportion of cybersecurity professionals who are women and minorities, and have suggested that this lack of representation may also lead to underemphasis on threats predominantly experienced by those groups [104].) Intimate privacy invasions are often diffuse and covert, unlike the high-profile data breaches regularly reported in the news and may therefore also garner less attention and concern in system design.

Some aspects of this problem must be mitigated by law and policy. A recent Citizen Lab report on stalkerware concluded with a list of detailed policy recommendations to regulate that industry [49]. Further, we need increased penalties for abuse cases that include digital tracking. Eva Galperin of the Electronic Frontier Foundation has called on US law enforcement to prosecute stalkerware companies on hacking charges [105]. Legal scholar Danielle Citron has also articulated a policy agenda to increase civil and criminal penalties against these companies, and to increase digital forensic training for state and local agencies [38]. Some laws have attempted to criminalize the usage of more general IoT devices for surveillance purposes.

The degree to which system designers should be held morally responsible—or legally liable—for every misuse of the technologies they develop is a policy question without easy answers, particularly for general purpose technologies put to unintended uses, and we do not attempt to address it here. However, by taking intimate threat models seriously from the outset, system designers can take some steps to proactively mitigate the risks of intimate partner threats. Importantly, many forms of design may have important roles to play in this mitigation, from visual aspects of a user interface to core system functionalities, and including both the design of physical "things" and of information flows and processes [106].

All engineering involves trade-offs, involving both security and functionality. The same capability that allows a parent to monitor where their child goes online can also allow a spouse to monitor their partner. And some attacks simply can't be detected by technology: a remote website, for example, will very likely not be able to tell when someone is authenticating under the duress of threatened physical violence from an abuser. It is not our intention to demand that system designers prioritize intimate privacy threats ahead of all other design considerations. Rather, by bringing to the fore considerations about an underspecified privacy threat, we suggest that designers take into account the concerns described in this article during systems design, understanding that they will need to be weighed against other goals and requirements.

Figure 1 offers a heuristic for understanding common relationships between the features of intimate threats and their design implications. It summarizes the four common features of intimate threats we have described in the previous section, and how recognition of these features might inform more thoughtful design. We offer the heuristic not as a definitive, exhaustive list, but as an analytic guide for assessing the risks of intimate threats, the resources they bring to bear, and potential remediations against them. We also do not claim that any one feature is necessarily *exclusive* to intimate threats—indeed, some are shared by other contexts of insider attack, for example—but we believe the constellation of features we describe here is distinctive enough to merit treating intimate threats as their own class of privacy threat.

With all this in mind, we offer the following general design considerations, drawing from the common features we have enumerated, for system designers to help prevent and ameliorate intimate threats.

Implication 1: Recognize privacy in intimate contexts as a balance among multiple interests and values

As we have discussed, some degree of monitoring is inevitable, desirable, and perhaps even necessary in intimate relationships. Designing for intimate privacy means acknowledging this and finding ways to balance among legitimate interests in privacy protection, safety and caretaking, trust and closeness, and authority—while also

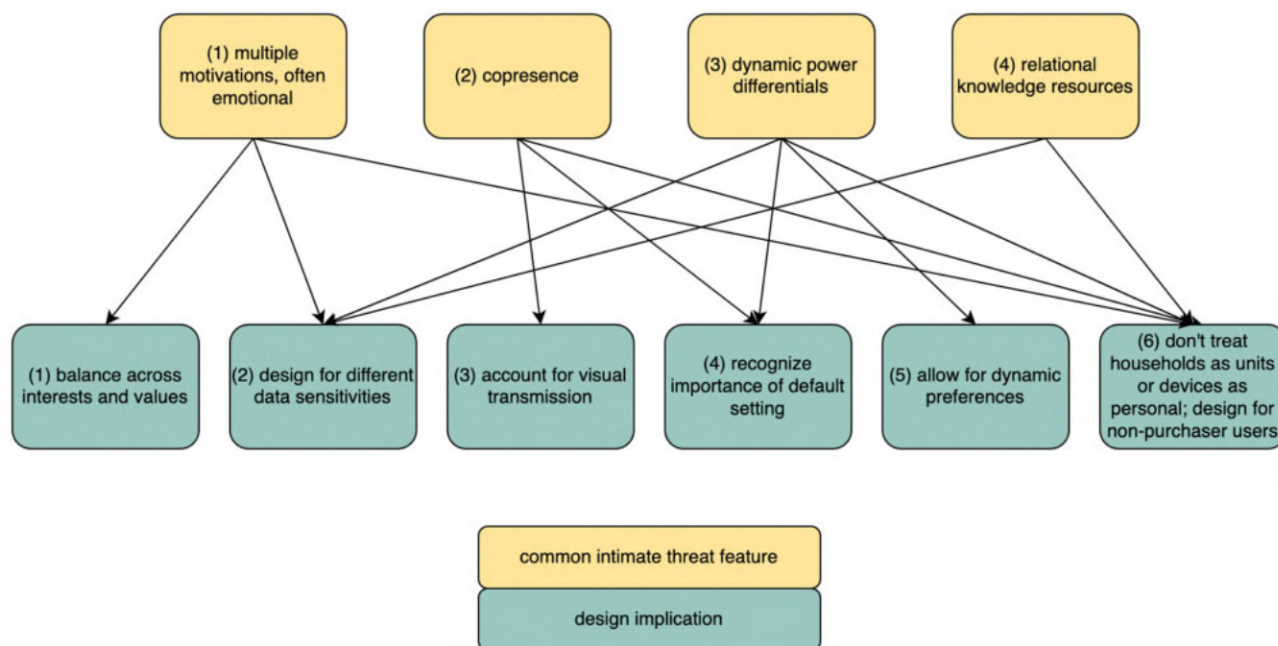


Figure 1: Some common features of intimate threats and their design implications. The list offered here is non-exhaustive but offers a heuristic for thinking about designing with intimate threats in mind. The arrows in the diagram are intended to indicate what design considerations we consider to be especially salient in the presence of particular threat features.

acknowledging that these interests may carry very different weights across different relationships, cultures, and points in time.

There are some good examples of tools that strike this difficult balance well. For example, License+ is a teen driver monitoring app that aims to provide parents with “just the right amount of information so they can stay up-to-date...and the driver doesn’t feel spied on” [107]. This is accomplished by giving parents access to a teen’s city-level location data (not finer-grained GPS coordinates) and bounding use of the app to 100 total hours—enough to coach new drivers into good practices, but not enough to surveil them indefinitely. The design of the app recognizes parents’ legitimate interests in their children’s safety, but balances that against a teen’s desire for privacy. Balancing these competing interests is difficult and context-specific; a good first step is simply to specify and acknowledge the values at stake and how they may be in tension with one another.

Implication 2: Recognize different data sensitivities to intimate threats

Intimate threats may have impacts on the types of data that require extra protection. For example, location data, friends lists, calendar data, and communications are likely targets for an intimate attacker, who wants to know where the victim is and with whom they are talking [108]. Data that are normally considered sensitive (like financial account numbers and identification information) may or may not be as salient given an intimate attacker’s motivations.⁴

Intimate attacks can also intersect with more conventional privacy concerns in non-obvious ways. For example, a victim might regularly receive confidential information in the course of their work: for example, as a doctor, lawyer, or therapist. This information might be accessed as part of an intimate attack, and then either disclosed or used as a coercive lever. Traditional threat models often

fail in these contexts, and system designers should consider whether they have addressed threats against sensitive data from an intimate perspective, and not just a financial or political one.

Implication 3: Evaluate what information may be inadvertently transmitted through visual display

As we have discussed, some intimate privacy threats occur by virtue of copresence between victim, attacker, and device. Designers should be attentive to what information is displayed visually on the user interface, recognizing that this can be a vector for a privacy breach. Such disclosures are likely to be inadvertent on the part of the user, and information may be actively or passively received by an intimate adversary. In either case, these common disclosures demonstrate how a device can inadvertently divulge information that its owner may prefer to keep private [110, 111].

For example, most mobile operating systems display the content and sender of text messages on the lock screen of a device by default, as well as playing an audio alert indicating that a message has been received. When another app is in use, iOS displays an incoming text as a notification at the top of the screen. Operating systems on laptop and desktop computers also commonly display headers of incoming emails, text messages, Twitter direct messages, or other forms of contacts on-screen as they come in. Such design choices, while intended to be convenient for users, often lead to disclosures of private information when a device screen is in view of another person. Because such notifications typically “push” instantly upon receipt of a message, they further reduce a user’s capacity to manage her privacy temporally (e.g., receiving notifications when she can view them without the presence of an intimate).

Targeted online ads are another example. Much can be inferred about a person’s interests and characteristics based on what ads are

⁴ However, see findings suggesting that users have similar reported data-type sensitivities for insider (i.e., friend) access as stranger access [109].

targeted to them. If a browser is shared between family members, ads may “follow” a user around the web and could, quite by accident, reveal to subsequent users what sorts of things a parent, child, or intimate partner has been searching for [112]. Predictive features can also be revealing if viewed visually. Many systems predict recipients of communications based on previous activity. iOS suggests recipients of texts based, presumably, on the frequency and recency of contacts with them; Google Inbox’s interface similarly suggests frequent contacts when new messages are being composed. Predictive text within conversations can be similarly disclosive. For instance, iOS’s personalized autocorrect dictionary learns and suggests proper names, such as contacts’ names, which may reveal information about a user’s communication *patterns* should another person see or use the device.

When Firefox first introduced its private browsing feature, it was indicated by a purple bar across the browser window. This could be easily noticed from across the room, making it harder for someone in the same physical location as another to use the feature without it being obvious. Firefox has since changed the indication to a more discreet purple circle in the upper-right corner of the browser window. Apple’s Safari is still problematic: when the user enables private browsing, the normally white address bar turns grey. A better design would be to allow the user to disable any visual indication of private browsing. Other researchers propose inconspicuous forms of data entry, including haptic modalities and coded information [113].

There are other contexts in which designers are attentive to visual privacy invasion without significantly impeding usability. ATMs are designed with keyboard blockers to allow PINs to be entered privately; most websites mask entered passwords as bullets to prevent them from being revealed to screen onlookers [97]. Security mechanisms for the visually impaired are particularly attentive to visual and aural eavesdropping; Azenkot et al. [114] developed a multi-touch authentication method to protect against these risks. Google researchers developed a facial-recognition-based security feature to alert smartphone users when a gaze other than the user’s is detected looking at the screen [115]. Mac laptops turn off visual notifications when the display is being projected externally, in recognition of the fact that users showing their screen to a group likely do not want their private messages displayed. The NCAA built a “boss button” into its March Madness streaming site: if employees are watching basketball at work and the boss walks by, they can click the button and an unremarkable spreadsheet pops up temporarily to create the appearance of productivity [116]. Similar “escape” features appear on some intimate partner violence resource sites, to take the user to a generic webpage should an abuser walk into the room.

Implication 4: Recognize the importance of default-setting and the “blank slate” problem

Privacy defaults are important in all contexts: in general, people are unlikely to change the default settings of a system or service, due to inattention, lack of awareness, or technical difficulty. But in intimate contexts, default-setting is even more important. The launch of Google Buzz in 2010 serves as an illustrative example of the power of defaults. This early microblogging service automatically created a circle of friends for new users based on their most frequent email and chat contacts in Gmail. This was a privacy disaster for many in (or having left) abusive relationships, in some cases leading to physical endangerment for abuse survivors [117]. Having a different default would have prevented this problem from arising.

Furthermore: in intimate contexts, even when disclosive settings can be manually overridden by the user, overriding a default can *itself* create suspicion that the user has something to hide [6]. In most contexts, if an attacker compromises an account or device, we advise the victim to change the access credentials, to open a new account, to cut up the credit card, or otherwise to insulate themselves from the invasion. But in intimate contexts, this is fraught advice, given its limited effectiveness and the risks of escalation. Changing settings to protect one’s privacy might be a dangerous “tell,” signaling that the victim does not trust the attacker. Therefore, even taking steps to protect oneself against privacy invasion can create danger.

We call this the “blank slate” problem: removing an attacker’s access to data, without plausible deniability, may be the worst thing one can do. In abusive relationships, enabling additional privacy protections may result in escalating levels of abuse, thus further endangering the victim. The assumption that one has nothing to hide and thus will not take steps to protect their privacy is an example of what Marques et al. [19] term “performative vulnerability”: taking too many affirmative steps to prevent another’s access suggests a lack of trust. The same can be true of explicit conversations about access expectations. Stuart Schechter points out that “least privilege may be among the most sacred and respected principles of information security, but starting a conversation on appropriate use of household resources by informing children that their privileges are restricted to a prescribed set of allowable behaviors is a sure way to incite or escalate a conflict” [118]. More generally, the lack of trust that is often the foundation of an effective privacy policy can actively erode relations between intimate partners, family, and friends.

In this vein, Griggio et al. [55] advocate for allowing “discreet changes to privacy preferences” to avoid the unwanted communicative aspect of turning on a privacy setting against an intimate partner. Apple’s iOS offers an example in clear contravention of this advice. When Alice takes an affirmative step to stop sharing her location information with Bob, Bob is explicitly notified in the iMessage chat that “Alice has stopped sharing location with you.” This setting, which is not to our knowledge overridable by users, may pose real danger to users trying to protect themselves from intimate threats.

Implication 5: Recognize that privacy and sharing preferences are dynamic

System designers should take into account that sharing preferences will change: couples will break up, children will grow up, roommates will move in and out [12, 100]. Over the course of relationships, intimates’ uses of technology and their sharing and privacy preferences are likely to evolve to best suit their current relational aims. And more broadly, sharing norms and societal privacy expectations change over time. Technologies that fail to allow for change run the risk of ossifying outdated privacy expectations to the detriment of users’ current preferences.

This fluidity has two primary implications for designers. First, to the greatest extent possible, systems should accommodate changes to preferences. The ability to make discreet changes to privacy settings, discussed above in implication 4, is one aspect of this flexibility; designers may also take steps to avoid the ossification of sharing preferences, for example, by periodically prompting users to ensure that preferences have not changed and that they are aware of what is being shared.

Second, intimate privacy threats often become most salient at discrete moments of relationship transition [7, 54]. Systems should support users when they try to separate joint accounts and help account owners monitor their accounts for login attempts by ex-partners. This means recognizing and accounting for changing privacy preferences over time, not just at the discrete moment of account setup. Facebook has taken some positive steps in this regard. When a user changes their relationship status on the site to indicate a breakup, Facebook proactively displays a prompt asking them if they wish to adjust privacy settings with respect to the ex-partner (for example, hiding future posts from their ex, untagging their ex in past posts) [119].

Implication 6: Realize that households are not units; devices are not personal; the purchaser of a product is not its only user

System designers build in assumptions about intrafamilial privacy expectations, and often treat a household as a “unit” for purposes of information sharing. These assumptions are incorrect if a privacy threat comes from within one’s own household. Often when an account is shared (a cell phone family plan, a TV streaming subscription, a smart home service, health insurance coverage), all users’ data associated with that account is accessible to whoever is responsible for payment. But this need not be the case. For example, a single Netflix account is regularly shared amongst an entire household, even though individual users may watch content on different screens. Netflix’s security architecture supports multiple profiles in one account, but there is no privacy between them [120]. On the other hand, YouTube TV also supports multiple profiles, but allows those profiles to be individually password-protected, enabling people in a household to better balance their individual needs for sharing and privacy (see also [121]).

Similar failures may occur when households share common channels for information transmission. This often arises when information collected from Internet use is transferred to the real world. Unsolicited email is delivered to an individual email box, while unsolicited paper is delivered to a (shared) household physical mailbox. This difference was illustrated in a widely read privacy anecdote where Target Corporation deduced that a young woman was pregnant and sent her a paper flyer with baby-related offers, alerting the woman’s father to the pregnancy before she told him [122]. Similarly, Pakistani law enforcement assures legal adult victims of cyber-harassment of confidentiality when they register complaints online, but then delivers further communication to the victim’s house—which is predominantly a family home [123]. A similar issue can occur in cars, which increasingly offer a Bluetooth interface to connect with the driver’s phone—and may announce when and from whom a driver receives a text message or a phone call, despite the fact that the car is often a shared space. Smart home technologies present particular challenges in this regard; taking steps like providing visible indicators of data capture (e.g., lights that flash when audio or video is being recorded) can be one way to allow multiple users with divergent privacy preferences to better protect their privacy interests vis-à-vis one another [100, 124].

The converse of the above assumption is that devices considered “personal” are used by only one person. But abundant research demonstrates that this is often not the case, and that device sharing can facilitate unwanted information disclosure [16, 125]. For example, many user interfaces offer seamless integration of content across devices, under the apparent assumption that each of a user’s devices will be used by that user alone. For instance, if a user has an

iCloud account to which two devices—say, an iPhone and an iPad—are registered, iOS will by default sync iMessages across both devices. But in a family, devices are often shared, rather than being used solely by one iCloud registrant. The seamlessness of this integration fails to realistically reflect typical device usage patterns, and can facilitate inadvertent disclosures in so doing.

System designers should design with *all* potential users’ privacy in mind. Companies have a market incentive to build devices for the benefit of the paying customer. But if the use of a device increases privacy risk to another person who is *not* the direct customer, the interests of that person must be protected as well.

Most fundamentally, data access should not be covert. An app to monitor a loved one’s cell phone that has no visible icon seems more likely to be used without consent than one that reveals itself [48]. Another approach to preventing covert access is to leave an “access trail” letting users know when their data has been viewed. For example, in Norway, all salary data is public—but searches can’t be conducted anonymously, and people can see who has viewed their salary [126]. Facebook employees similarly get a “Sauron alert” from the company if a colleague accesses their account [127]. Though measures like these do not prevent access, they do prevent *covert* access, making it more likely that privacy preferences will be governed by social and relational norms. Improving the discoverability of monitoring is not a silver bullet to the problem of intimate privacy threat, but it can be a useful tool to help prevent and provide recourse against unwanted surveillance.

Conclusion

Data gathering in intimate relationships is likely to increase in the near future, both due to the increased digital traces on social media and the proliferation of data-gathering devices in homes. An enormous number of consumer IoT products are explicitly marketed for the protection, supervision, and care of intimates [28]. Even IoT devices that are not specifically so marketed often allow us to draw inferences about an intimate’s activities, and often without their awareness [128]: web-enabled security cameras that capture the behaviors of anyone in the home [129], or the sleep tracker that records the activities of anyone using the bed [52]. The growth of this consumer market and the continuing normalization of monitoring across intimate relationships makes this a class of threats to be taken seriously.

There are some signs that intimate threats are beginning to be recognized by the tech industry. For example, Kaspersky recently announced an effort to alert users to the presence of stalkerware apps covertly installed on Android products [130], and Google made some efforts to scrub similar apps from its Play Store following research about their prevalence [48]. We take heart at these developments, but suggest that consideration of intimate threat models should be more thoroughly integrated into system design broadly, rather than only in response to the most egregious apps for covert intimate monitoring.

Addressing these threats not only extends the field of cybersecurity to meet the needs of vulnerable communities, but also brings it into fruitful dialogue with other disciplines and modes of inquiry. It requires an integrated sociotechnical approach to understanding privacy. It requires focusing our attention both on new problems and new tools for addressing them, taking seriously the social and cultural sites within which technologies and users are situated, and acknowledging the full range of harms privacy threats can pose. It requires thinking more broadly about how we design secure systems.

By recognizing the class of intimate threats and characterizing their common features, we can begin to articulate design principles to address them.

Acknowledgments

This work was supported by the National Science Foundation [CNS-1916096]. The authors would like to thank Kendra Albert, Nighat Dad, Jessica Dawson, Shauna Dillavou, Beth Friedman, Vicki Laidler, Damon McCoy, Barath Raghavan, Stuart Schechter, and Adam Shostack for their helpful comments on a draft version of this article, as well as Clara Berridge, Rahul Chatterjee, Nicki Dell, Periwinkle Doerfler, Diana Freed, Jodi Halpern, Sam Havron, Lauren Kilgour, Damon McCoy, Tom Ristenpart, and Luke Stark for prior research collaborations that informed this work. Finally, the authors would like to thank the interdisciplinary workshop on Security and Human Behavior (SHB) for sparking this collaboration.

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EXHIBIT 61

**7/20/22 Jonathan
Hochman Vol. 1
Deposition
Transcript Excerpts**

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UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA
OAKLAND DIVISION

CHASOM BROWN,
Plaintiff, Case No.
vs. 4:20-cv-03664-YGR-SVK
GOOGLE LLC,
Defendant.

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ZOOM VIDEOTAPED DEPOSITION OF
JONATHAN E. HOCHMAN

July 20, 2022

10:15 a.m.

TAKEN BY:

JOSEF ANSORGE, ESQ.
ATTORNEY FOR DEFENDANT

REPORTED BY:

BELLE VIVIENNE, RPR, CRR, NJ-CRR,
WA/CO/NM-CCR
NATIONALLY CERTIFIED REALTIME
COURT REPORTER
JOB NO. 5308381

Page 1

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A P P E A R A N C E S

FOR THE PLAINTIFF:

MARK MAO
BOIES SCHILLER FLEXNER LLP
44 Montgomery Street, 41st Floor
San Francisco, California 94104
415.293.6800
mmao@bsfllp.com

RYAN MCGEE
MORGAN & MORGAN
201 North Franklin Street
7th Floor
Tampa, Florida 33602
813.223.0931
rmcgee@forthepeople.com

ALEXANDER FRAWLEY
IAN CROSBY
SUSMAN GODFREY
1301 Avenue of the Americas
32nd Floor
New York, New York 10019
Afrawley@susmangodfrey.com

COUNSEL FOR PLAINTIFF IN CALHOUN MATTER:

ADAM PROM
DICELLO LEVITT & GUTZLER
10 North Dearborn Street, Sixth Floor
Chicago, Illinois 60602
312.214.7900
aprom@dicellolevitt.com

COUNSEL FOR DEFENDANT:

JOSEF ANSORGE
JOHN WILSON, IV
QUINN EMANUEL URQUHART & SULLIVAN LLP
51 Madison Avenue
New York, New York 10010
josefansorge@quinnemanuel.com
CARL SPILLY
QUINN EMANUEL URQUHART & SULLIVAN, LLP
1300 I Street, NW, Suite 900
Washington, D.C. 20005
202.538.8277
carlspilly@quinnemanuel.com

CONFIDENTIAL

1 APPEARANCES: (Continued)

2 CRYSTAL NIX-HINES

865 South Figueroa Street, 10th Floor

3 Los Angeles, California 90017

crystalnixhines@quinnemanuel.com

4
5 VIDEOGRAPHER:

Sean Grant

6
7 ALSO PRESENT:

Konstantinos Psounis, Ph.D.

Julie Burns

8 John Wilson, IV - Quinn Emanuel

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- - -
I N D E X
- - -

Testimony of:

JONATHAN E. HOCHMAN

MR. ANSORGE..... 10

- - -
E X H I B I T S
- - -

NO.	DESCRIPTION	PAGE
Exhibit 1	Expert Report of Jonathan Hochman.....	30
Exhibit 2	Jonathan Hochman's Curriculum Vitae.....	55
Exhibit 3	Article entitled Personally Identifiable Information (PII).....	146
Exhibit 4	Snapshot of a Google policy.....	163
Exhibit 5	Document entitled Mitigating Browser Fingerprinting in Web Specifications.....	184

Page 4

CONFIDENTIAL

1 if there was something more specific, like 12:03:07
2 if you showed me, well, here's a method A 12:03:08
3 and here's method B for this particular 12:03:11
4 problem, which do you think -- what are 12:03:14
5 the strengths and weaknesses of each? I 12:03:16
6 might be able to provide some information 12:03:19
7 about that, but -- but as you've posed the 12:03:20
8 question, it's -- it's -- it's overly 12:03:23
9 general, so I don't really think I can 12:03:26
10 give a meaningful answer. 12:03:27
11 BY MR. ANSORGE: 12:03:33
12 Q. Do you agree that for 12:03:33
13 methodologies in computer science, there 12:03:34
14 is some indicia of reliability? 12:03:36
15 A. I think that it's a -- the 12:03:43
16 question is very open-ended and each 12:03:45
17 methodology would tend to have some 12:03:55
18 strengths and weaknesses, and I'm not sure 12:03:57
19 how you can directly compare them. So I 12:03:59
20 guess I just don't know. I don't think I 12:04:05
21 can give you an answer to a question 12:04:07
22 that's so general. 12:04:09
23 Q. Before we turn to your opinions 12:04:12
24 in detail, I'd like to attempt to discuss 12:04:15
25 with you what you don't opine on. 12:04:19

Page 87

CONFIDENTIAL

1 Is that all right with you? 12:04:23

2 MR. MAO: Objection, it's super 12:04:25

3 vague. Go ahead. 12:04:27

4 A. It's your deposition, so you get 12:04:29

5 to ask the questions, and I'll try not to 12:04:31

6 ask too many questions and you can -- you 12:04:33

7 can ask. 12:04:36

8 BY MR. ANSORGE: 12:04:36

9 Q. Mr. Hochman, you do not opine 12:04:37

10 that Google builds its profile of users, 12:04:39

11 including plaintiffs and class members, by 12:04:43

12 fingerprinting techniques, correct? 12:04:45

13 MR. MAO: Objection, vague, 12:04:48

14 ambiguous, compound. 12:04:51

15 A. I don't think I can concede that 12:04:53

16 point to you. 12:04:55

17 BY MR. ANSORGE: 12:04:55

18 Q. Where do you opine that Google 12:04:58

19 builds its profile of users by 12:05:01

20 fingerprinting techniques? 12:05:03

21 A. I don't think I've expressed an 12:05:06

22 opinion in exactly the terms that you've 12:05:08

23 set up, but I think I've expressed some 12:05:12

24 opinions that touch upon that topic. So I 12:05:15

25 don't want to exclude that. The opinions 12:05:18

Page 88

CONFIDENTIAL

1 in the report speak for themselves. 12:05:23

2 Q. Well, Mr. Hochman, do you opine 12:05:25

3 that Google uses fingerprinting techniques 12:05:28

4 for cross-site tracking? 12:05:31

5 MR. MAO: Objection, 12:05:33

6 argumentative with the witness. The 12:05:34

7 document speaks for itself. 12:05:37

8 Go ahead. 12:05:39

9 A. At a minimum, I talk about the 12:05:41

10 data that Google is collecting and 12:05:44

11 retaining and how it could be used for 12:05:46

12 fingerprinting. 12:05:48

13 Additionally, I will point out 12:05:50

14 that there's a lot of information that we 12:05:51

15 requested from Google that Google refused 12:05:53

16 to provide or that Google withheld or that 12:05:57

17 Google delayed or that Google produced 12:06:01

18 incompletely or with errors, and that this 12:06:04

19 eventually led to Google being sanctioned 12:06:09

20 for discovery abuse. 12:06:13

21 So I just want to be clear that 12:06:14

22 there's some information that I sought 12:06:20

23 that -- that wasn't provided, and the lack 12:06:21

24 of some information necessitated that I 12:06:25

25 conduct my analysis along the pathways for 12:06:29

Page 89

1	which information was available.	12:06:34
2	BY MR. ANSORGE:	12:06:38
3	Q. In which of your opinions do you	12:06:43
4	state that Google uses fingerprinting	12:06:44
5	techniques to build profiles?	12:06:48
6	MR. MAO: Objection, the	12:06:51
7	document speaks for itself.	12:06:51
8	A. I can look through the document	12:06:57
9	here. I just -- we should be cognizant	12:06:59
10	it's 155 pages, and it may take me a bit	12:07:01
11	of time to look through it and point out	12:07:04
12	some things. If you want me to take the	12:07:06
13	time and do that, I will.	12:07:08
14	Or if you would prefer, if you	12:07:09
15	know where those sections are already, you	12:07:11
16	might just want to go to them and ask me	12:07:14
17	about them for economy of time. I'll	12:07:16
18	leave that to you to choose which way you	12:07:17
19	want me to do it.	12:07:20
20	BY MR. ANSORGE:	12:07:23
21	Q. Let's turn to paragraph 223, the	12:07:24
22	last sentence.	12:07:28
23	A. Just a moment. I'm going to	12:07:34
24	read that and also some of the surrounding	12:07:37
25	content.	12:07:39

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1 report that the private browsing data at 16:18:51
2 issue in this case is stored in GAIA logs? 16:18:54

3 A. Private browsing data stored in 16:18:54
4 GAIA logs. I think the private browsing 16:19:04
5 data is stored in B logs, not P logs, and 16:19:06
6 that the B logs and the P logs can be 16:19:11
7 linked. 16:19:15

8 Q. So the answer would be no, you 16:19:15
9 do not opine anywhere in your report that 16:19:17
10 the private browsing data at issue in this 16:19:19
11 case store in GAIA logs, correct? 16:19:22

12 A. I like my answer more than 16:19:25
13 yours. 16:19:27

14 Q. Can you point us to any part of 16:19:27
15 your report where you show that the 16:19:34
16 private browsing data at issue is stored 16:19:37
17 in GAIA logs? 16:19:42

18 A. I haven't asserted that the 16:19:43
19 private browsing data is stored in GAIA 16:19:45
20 logs. I've said, either in this report or 16:19:46
21 in the supplemental report, that the 16:19:48
22 private browsing data is stored in B logs, 16:19:50
23 and that the B logs are linked in a 16:19:54
24 variety of manners to the P logs. 16:19:58

25 Q. How are the B logs linked to the 16:20:06

Page 232

CONFIDENTIAL

1 P logs? 16:20:08

2 A. I've addressed that in prior 16:20:08

3 answers, so I would just include that as 16:20:10

4 part of this answer. And I can also point 16:20:12

5 you to the analysis that's been done in 16:20:17

6 this report and in the supplemental report 16:20:18

7 and the supporting information that 16:20:21

8 appears in the appendices to the report, 16:20:22

9 but I've shown how these things are 16:20:25

10 linked. 16:20:27

11 Q. Well, let's pull up your report, 16:20:31

12 please, and take the time to show me in 16:20:33

13 what passage you're stating that these 16:20:35

14 things are linked because we've read in 16:20:39

15 your report to describe how everything 16:20:40

16 could be linked. And it sounds like this 16:20:42

17 is a slightly different opinion that 16:20:44

18 you're offering today. 16:20:46

19 A. I think I've addressed this 16:20:47

20 already. It's just the philosophical 16:20:49

21 difference between "are linked" and "is 16:20:51

22 linked," okay? 16:20:56

23 The data may being stored in 16:20:57

24 separate places, but there's a common -- 16:20:58

25 there are common keys between them and 16:20:59

Page 233

CONFIDENTIAL

1 that, in effect, this common key forms a 16:21:02
2 linkage, okay? 16:21:05
3 Q. What is the -- 16:21:07
4 A. Someone could take and put them 16:21:08
5 together in the same place, or they can be 16:21:10
6 left in separate places, but they're still 16:21:12
7 effectively a pointer back and forth 16:21:14
8 between them. 16:21:16
9 Q. Would it be fair to say that 16:21:18
10 your opinion is that they are joinable? 16:21:19
11 A. Yes, they're -- I've said that 16:21:24
12 they are joinable. I believe I've talked 16:21:26
13 about joinability. 16:21:29
14 In any case, I think it would be 16:21:31
15 good at this point to introduce the 16:21:33
16 supplemental report as a exhibit because I 16:21:37
17 may want to point to things in there in 16:21:40
18 answering some of these questions. 16:21:43
19 MR. MAO: And I just note this 16:21:45
20 is the second time that the witness 16:21:47
21 has requested that. So I will have 16:21:49
22 that standing objection for any other 16:21:50
23 subsequent questions you raise without 16:21:52
24 giving him what he requested. 16:21:54
25 MR. ANSORGE: All right. Let's 16:21:58

Page 234

CONFIDENTIAL

1 pull up the supplemental report now. 16:22:02

2 I have a whole bunch of questions 16:22:04

3 about your opening report still, but 16:22:07

4 you require it before you. We'll -- 16:22:10

5 we are going to have somebody load it, 16:22:11

6 and we can pull that up for you, 16:22:12

7 Mr. Hochman. 16:22:14

8 MR. MAO: Thank you. 16:22:15

9 (Exhibit 7, Jonathan Hochman's 16:22:16

10 Supplemental Report, marked for 16:22:16

11 identification.) 16:22:16

12 A. Since we're working across two 16:22:18

13 reports now, I actually have created a 16:22:20

14 master index that's like a table of 16:22:22

15 contents for both reports and all the 16:22:24

16 appendices. I've just sort of copied and 16:22:26

17 pasted that stuff into one place. 16:22:29

18 I would like to use that because 16:22:33

19 it will expedite my answering your 16:22:34

20 questions, and I'm willing to have the 16:22:36

21 lawyer send you a copy of that, as well, 16:22:38

22 if you -- if you don't mind me using that. 16:22:41

23 MR. ANSORGE: Yeah. So let's 16:22:44

24 take a break then, and he can send it 16:22:46

25 now. I need to address something on 16:22:49

Page 235

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CERTIFICATION

I, BELLE VIVIENNE, a Nationally
Certified Realtime Reporter, do hereby
certify:

That the witness whose testimony as
herein set forth, was duly sworn by me;
and that the within transcript is a true
record of the testimony given by said
witness.

I further certify that I am not
related to any of the parties to this
action by blood or marriage, and that I am
in no way interested in the outcome of
this matter.

IN WITNESS WHEREOF, I have hereunto
set my hand this 25th day of July 2022.



BELLE VIVIENNE, CRR, CCR, RPR

* * *

EXHIBIT 62

2/14/2023 Glenn Berntson Deposition Transcript Excerpts

CONFIDENTIAL

IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF CALIFORNIA
OAKLAND DIVISION

---o0o---

CHASOM BROWN, et al.,)
on behalf of themselves and)
all others similarly)
situated,)
Plaintiffs,) Case No.
vs.) 4:20-cv-03664-YGR-SVK
GOOGLE LLC,)
Defendant.)
_____)

---o0o---

Videotaped Zoom Deposition of
GLENN BERNTSON
Tuesday, February 14, 2023
CONFIDENTIAL

---o0o---

Katy E. Schmidt
RPR, RMR, CRR, CSR 13096
Veritext Job No.: 5757744

CONFIDENTIAL

1 APPEARANCES:

2 For The Brown Plaintiffs:

3 (Appeared via Zoom)

4 BOIES SCHILLER FLEXNER LLP

BY: MARK MAO, Esq.

5 44 Montgomery Street, 41st Floor

San Francisco, California 94104

6 415.293.6800

mmao@bsfllp.com

7 (Appeared via Zoom)

8 SUSMAN GODFREY, LLP

9 BY: ALEXANDER FRAWLEY, Esq.

1301 Avenue Of The Stars, 32nd Floor

10 New York, New York 10019

afrawley@susmangodfrey.com

11
12 For The Defendants:

13 (Appeared via Zoom)

14 QUINN EMANUEL URQUHART & SULLIVAN LLP

BY: JOSEF ANSORGE, Esq.

15 BY: JOSEPH MARGOLIES, Esq.

51 Madison Avenue, 22nd Floor

16 New York, New York 10010

212.849.7000

17 josefansorge@quinnemanuel.com

18 Also present:

19 Steven Togami, Videographer

20 Matthew Gubiotti, In-house counsel

21 ---o0o---

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1 every individual record, set true or false, or set 09:05
2 true or some cases, false on others, and left it 09:05
3 unpopulated on others. 09:05

4 But logically I think there is two states, 09:05
5 and the second state may be represented by a no or no 09:05
6 data at all. 09:05

7 I haven't inspected this field in the logs 09:05
8 for which is present to be able to answer that 09:05
9 question definitively. 09:05

10 Q. Could Google delete any data from its logs 09:05
11 on the server side where maybeChromeincognito is set 09:05
12 to true? 09:05

13 MR. ANSORGE: Objection. Vague. 09:06
14 Foundation. Incomplete hypothetical. 09:06

15 THE WITNESS: I'll respond to this in two 09:06
16 parts. 09:06

17 No. 1, Google has the technical ability to 09:06
18 update the contents of logs. However, I am unaware of 09:06
19 any such process that updates the contents of logs 09:06
20 that keys off of anything other than, for example, 09:06
21 anonymizing a log to make sure users can no longer be 09:06
22 identified. 09:06

23 And because we're talking about a field that 09:06
24 is a heuristic as opposed to definitive data here as a 09:06
25 user who has said, "I want to delete this data" or the 09:06

Page 109

CONFIDENTIAL

1 TTL associated with this ID has been passed so we need 09:06
2 to delete the data. 09:07

3 I'm not aware of any process that goes 09:07
4 through and modifies the state of logs in terms of 09:07
5 deleting data, for example, based off of some 09:07
6 presumptive value that in and of itself we don't 09:07
7 actually have business logic right now tied into 09:07
8 differential treatment, especially in ads for this 09:07
9 attribute. 09:07

10 So could it happen? Technically, yes. 09:07

11 Would it happen from a business perspective? 09:07

12 I know of no precedent or an existing system that 09:07
13 justifies that, and so I'd say no. From a business 09:07
14 case, no, we wouldn't do that. 09:07

15 BY MR. FRAWLEY:

16 Q. Is that because it would be expensive to do 09:07
17 that? Is that why from a business case it wouldn't be 09:07
18 done? 09:07

19 A. The way we partition IDs and the fact that 09:08
20 signed-in IDs and signed-out IDs are kept separate, 09:08
21 the fact that the cookie jar itself is completely 09:08
22 distinct in private browsing mode, the fact we didn't 09:08
23 do any fingerprinting to try to join IDs across, say, 09:08
24 these different cookie jars, means that the 09:08
25 partitioning of IDs we get when a user remains signed 09:08

Page 110

CONFIDENTIAL

1 out in private browsing mode is a highly effective 09:08
2 means of protecting their user privacy and keeping 09:08
3 that data completely separate. 09:08

4 The fact we have TTLs around the data that 09:08
5 we've logged associated with a private browsing mode 09:08
6 generated Biscotti, we'll just delete that data 09:08
7 shortly thereafter anyway. 09:08

8 So we already delete the data because it's 09:08
9 orphaned. We already have protections in place to 09:08
10 make sure that that data isn't joined with any other 09:08
11 data. 09:08

12 So I guess my response is it's not an issue 09:08
13 of whether it's expensive. It's an issue of it 09:08
14 doesn't really serve a purpose. And we've designed 09:09
15 our protections already to make sure user privacy is 09:09
16 only respected in our ad-serving systems as it relates 09:09
17 to private browsing mode. 09:09

18 MR. ANSORGE: Could I get a count on the 09:09
19 time? Is that all right with you, Mr. Frawley? 09:09

20 MR. FRAWLEY: Sure. 09:09

21 THE VIDEOGRAPHER: Current time on the 09:09
22 record is two hours, 49 minutes. 09:09

23 MR. ANSORGE: Thank you. 09:09

24 BY MR. FRAWLEY:

25 Q. Can you look at paragraph 42 of your 09:09

Page 111

CONFIDENTIAL

1 declaration? 09:09

2 A. Yes. 09:09

3 Q. And do you see where you wrote: 09:09

4 "I understand that Mr. Hochman opines 09:09

5 that Google can identify class members by 09:09

6 fingerprinting IP address" -- "IP 09:09

7 addresses and user agent"? 09:09

8 Do you see that? 09:09

9 A. I do. 09:09

10 Q. Are you aware that to support that opinion, 09:09

11 Mr. Hochman relied on data produced through the 09:09

12 special master process? 09:10

13 A. No. 09:10

14 Q. And aside from the use of IP combined with 09:10

15 user agent, are you aware that Mr. Hochman relied on 09:10

16 other identifiers to support his opinion that Google 09:10

17 can identify class members? 09:10

18 MR. ANSORGE: Objection. Vague and 09:10

19 foundation. 09:10

20 THE WITNESS: Honestly, I read -- I don't 09:10

21 know because the first document or the second document 09:10

22 from Dr. Hochman, and I'm responding to what he wrote 09:11

23 I am unaware of how he generated these conclusions. 09:11

24 And the fact that we share data with plaintiffs, I 09:11

25 assume he would be involved, but it is not knowledge I 09:11

Page 112

CONFIDENTIAL

1 actually have. 09:11

2 BY MR. FRAWLEY: 09:11

3 Q. Now, do you see where you write in your 09:11

4 words at the end of this paragraph: 09:11

5 "Google does not combine IP address 09:11

6 and user agents to identify or reidentify 09:11

7 users and has longstanding policies 09:11

8 against engaging in such fingerprinting"? 09:11

9 Do you see that? 09:11

10 A. I do see that. 09:11

11 Q. And you wrote "does not"; correct? 09:11

12 A. Yes. 09:11

13 Q. And the Mr. Hochman opinion you quote, it 09:11

14 says Google can readily use the data; right? 09:12

15 A. Yes. 09:12

16 Q. So fair to say that you're not in this 09:12

17 declaration asserting an opinion about what Google can 09:12

18 do, but you're asserting an opinion about what Google 09:12

19 does or does not do. 09:12

20 Is that fair? 09:12

21 A. No. 09:12

22 Q. So why did you use the word "does" instead 09:12

23 of, for example, "could"? 09:12

24 A. There are a couple of pieces that I want to 09:12

25 add to the response here. 09:12

Page 113

CONFIDENTIAL

1 No. 1, IP address is available only in very 09:12
2 restricted portions of our logs. To be able to 09:12
3 actually get access to logs that -- and to be able to 09:12
4 read the field that contains IP address requires 09:12
5 privileged access that requires a detailed review of 09:13
6 the use case very explicitly. 09:13

7 So behind these policies that I referred to, 09:13
8 which are both externally-facing policies, Google's 09:13
9 commitment to the world that we do not fingerprint 09:13
10 users, it's public. 09:13

11 There are internal policies that are 09:13
12 detailed basically defining exactly what engineers can 09:13
13 do and what they can't do, how we design products and 09:13
14 how we don't design products. 09:13

15 You know, to say, "Oh, you can do this," if 09:13
16 we're actually abiding by our policies, we can't do 09:13
17 this. 09:13

18 In addition, we have technical protections 09:13
19 in place to make sure that these policies we have in 09:13
20 place that we expect every one of our employees to 09:13
21 follow have to follow it. 09:13

22 There is no way you can build a product at 09:13
23 Google that is going to fingerprint a user using IP 09:14
24 address and user agent, and then use that to track 09:14
25 users across the web for the purposes of advertising. 09:14

Page 114

CONFIDENTIAL

1 It's impossible. Because there are technical 09:14
2 restrictions, there are policies that are very clear, 09:14
3 there are reviews that every piece of code goes 09:14
4 through where multiple people have to look at that 09:14
5 code. 09:14

6 So I say it does because we don't. But if 09:14
7 you actually look at the processes and policies we 09:14
8 have in place, operationally this is impossible 09:14
9 because we've committed to not do it and we put 09:14
10 processes in place that mean it would be impossible to 09:14
11 actually have a product doing this. 09:14

12 The only thing that I can concede is that if 09:14
13 a person who was an engineer, who was in a trusted 09:14
14 role, who was given access to this data for a very 09:14
15 specific business purpose, decided they wanted to find 09:14
16 an IP address and do something nefarious with it, it 09:15
17 is hypothetically possible. But if they did so, they 09:15
18 would be fired. 09:15

19 So, no, I'm not going to concede Google 09:15
20 could do this. We have made it impossible for 09:15
21 ourselves to be able to do this because user privacy 09:15
22 matters. 09:15

23 Q. Does Google Ad Manager use any data that it 09:15
24 receives to train any AI or machine-learning 09:16
25 algorithms? 09:16

Page 115

Page 116

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REPORTER'S CERTIFICATE

---o0o---

STATE OF CALIFORNIA)
) ss.

COUNTY OF YOLO)

I, KATY E. SCHMIDT, a Certified Shorthand
Reporter in and for the State of California, duly
commissioned and a disinterested person, certify:

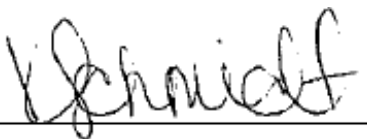
That the foregoing deposition was taken before
me at the time and place herein set forth;

That GLENN BERNTSON, the deponent herein, was
put on oath by me;

That the testimony of the witness and all
objections made at the time of the examination were
recorded stenographically by me to the best of my
ability and thereafter transcribed into typewriting;

That the foregoing deposition is a record of
the testimony of the examination.

IN WITNESS WHEREOF, I subscribe my name on this
16th day of February, 2023.



Katy E. Schmidt, RPR, RMR, CRR, CSR 13096
Certified Shorthand Reporter
in and for the
County of Sacramento,
State of California
Ref. No. 5757744 KES

Page 148

EXHIBIT 63

**2/15/23 Jonathan
McPhie Deposition
Transcript Excerpts**

CONFIDENTIAL

IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF CALIFORNIA
OAKLAND DIVISION

---o0o---

CHASOM BROWN, et al.,)
on behalf of themselves and)
all others similarly)
situated,)
Plaintiffs,) Case No.
vs.) 4:20-cv-03664-YGR-SVK
GOOGLE LLC,)
Defendant.)
_____)

---o0o---

Videotaped Zoom Deposition of
JONATHAN MCPHIE
Wednesday, February 15, 2023
CONFIDENTIAL

---o0o---

Katy E. Schmidt
RPR, RMR, CRR, CSR 13096
Veritext Job No.: 5768672

Page 1

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JONATHAN MCPHIE

Page 2

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1 APPEARANCES:

2 For The Brown Plaintiffs:

3 (Appeared via Zoom)

4 BOIES SCHILLER FLEXNER LLP

BY: MARK MAO, Esq.

5 BY: LOGAN WRIGHT, Esq.

44 Montgomery Street, 41st Floor

6 San Francisco, California 94104

415.293.6800

7 mmao@bsfllp.com

8 For The Defendants:

9 (Appeared via Zoom)

10 QUINN EMANUEL URQUHART & SULLIVAN LLP

BY: STEPHEN A. BROOME, Esq.

11 BY: ALY OLSON, Esq.

865 S Figueroa Street, 10th Floor

12 Los Angeles, California 90017

213.443.3285

13 stephenbroome@quinnemanuel.com

14 Also present:

15 Sean Grant, Videographer

16 Matthew Gubiotti, In-house counsel

17 ---o0o---

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INDEX OF EXAMINATION

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	Page
Examination by Mr. Mao	08

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QUESTIONS INSTRUCTED NOT TO ANSWER

Page	Line
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(NOTHING OFFERED.)

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1 So here is a really good example. And if 11:34
2 it's okay with you, let me give you the example and 11:34
3 then tell you why it's especially important. 11:34

4 Q. Yeah. I'm just trying to figure out where 11:34
5 you're looking -- where you're referring to on this 11:34
6 page. Sorry. 11:34

7 A. Absolutely. 11:34

8 So if we start in the paragraph, it's the 11:34
9 second paragraph under 63. So this would be lines 9 11:34
10 through 11. 11:34

11 Q. Okay. Got it. Yep. 11:34

12 A. So it says -- let me just read it: 11:35

13 "If you use Chrome in incognito or 11:35
14 guest mode, it will not transmit any 11:35
15 pre-existing cookies to sites that you 11:35
16 visit. Sites may deposit new cookies on 11:35
17 your system while you are in these modes." 11:35

18 So this is really important. If a user is 11:35
19 in a normal browsing mode and there is this exchange 11:35
20 of information, including information contained with a 11:35
21 cookie, if a user wants to prevent that pre-existing 11:35
22 cookie to be transmitted to Google upon visiting a 11:35
23 website, either first or third party, a user may use 11:35
24 incognito mode and those pre-existing cookies, Google 11:35
25 will not receive on that visit. 11:35

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1 And the reason why this is so important, I 11:35
2 think this bears special mention as we go through this 11:35
3 list, is that one of the primary purposes of incognito 11:35
4 mode is -- and one of kind of the -- some of the power 11:35
5 behind incognito mode is perhaps not as much in terms 11:35
6 of changing how the internet works -- you know, you 11:35
7 load a web page, you have to send information, receive 11:36
8 information when you load a web page. That stays the 11:36
9 same. 11:36

10 But the association with how you use the 11:36
11 internet previously and the information that may be 11:36
12 stored previously, including pre-existing cookies or 11:36
13 your account information, that disassociation of your 11:36
14 previous activity that was in a pre-incognito mode and 11:36
15 the activity in your incognito mode, that is perhaps 11:36
16 the most powerful example of information that you have 11:36
17 provided to Google under consent that you are no 11:36
18 longer transmitting to Google because you are now in 11:36
19 incognito mode. 11:36

20 It does not mean, you know, as -- as 11:36
21 specified in the declaration, it does not mean that 11:36
22 any information isn't transmitted to Google, but it 11:36
23 means that the kind of information that a user may not 11:36
24 want to transmit is no longer transmitted because it 11:36
25 pertains to a pre-existing a cookie or their Google 11:36

Page 90

CONFIDENTIAL

1 account. 11:36

2 Q. Okay. So this again falls under the bucket 11:36

3 of less information transmitted. 11:36

4 Fair? 11:36

5 We are on third -- 11:36

6 A. Yes, yes. I think that's fair. 11:37

7 Q. Anything else? 11:37

8 A. No. 11:37

9 MR. BROOME: Objection to form. 11:37

10 BY MR. MAO: 11:37

11 Q. Okay. So you identified for me four and 11:37

12 I'll -- one is don't use the website. I'm not going 11:37

13 to say what it's not. 11:37

14 Okay? 11:37

15 But your other three were block third-party 11:37

16 cookies, turn on an Analytics cookie button that may 11:37

17 be offered on some sites, and then using the incognito 11:37

18 mode. 11:37

19 And you're saying that for these -- these 11:37

20 three, there are modes that help control the type of 11:37

21 information that's flowing to Google but does not 11:37

22 necessarily stop Google from receiving data for those 11:37

23 third-party websites. 11:37

24 Is that correct? 11:37

25 MR. BROOME: Object to the form and the 11:37

1	characterization.	11:37
2	THE WITNESS: Yeah.	11:37
3	Actually, can I modify a previous answer?	11:37
4	MR. MAO: Sure.	11:37
5	THE WITNESS: I just want to make it clear	11:37
6	that when you said "anything else" and I said "no," I	11:37
7	was referring to that specific is example and not a	11:37
8	complete list of specific controls.	11:38
9	BY MR. MAO:	
10	Q. Oh, okay. Yeah. Right.	11:38
11	But is my recounting for the list of four so	11:38
12	far right, without limiting you to adding more,	11:38
13	accurate?	11:38
14	MR. BROOME: Object -- sorry. One second,	11:38
15	Jonathan.	11:38
16	THE WITNESS: Yeah.	11:38
17	MR. BROOME: Let me object to the form and	11:38
18	the characterization of Mr. Mao's testimony.	11:38
19	Question. Sorry. Mr. Mao's question.	11:38
20	MR. MAO: That's better, Steve.	11:38
21	Go ahead.	11:38
22	THE WITNESS: So, sorry, I was referring to	11:38
23	the previous thing around wanting to reserve the	11:38
24	ability to talk about further controls. But -- so	11:38
25	that's all I was talking about before.	11:38

CONFIDENTIAL

1 Limiting it to your declaration. 11:44

2 A. So, again, I think it's really important to 11:44

3 clarify that the example of the third-party website 11:44

4 that builds into the controls is a category and not 11:44

5 like a -- it's not limited to just that specific 11:45

6 screen shot. 11:45

7 Q. Okay. So what other controls can they 11:45

8 implement? 11:45

9 A. They could implement -- well, this is beyond 11:45

10 the scope -- a little bit beyond the scope of what I 11:45

11 was trying to get with -- with -- with the 11:45

12 declaration; right? I was not trying to have an 11:45

13 exhaustive list of all the things that websites could 11:45

14 do. I will give you one example. They could also 11:45

15 have a very similar control that would affect ads 11:45

16 cookies. 11:45

17 But beyond that, I'm really just not 11:45

18 prepared to speak to a comprehensive list of 11:45

19 everything that a website could do. 11:45

20 But it is very important in the declaration 11:45

21 to highlight the fact that not only, you know, are 11:45

22 those mechanisms available and are routinely used by 11:45

23 third-party websites, but in some cases, we -- you 11:45

24 know, we ask that websites, you know, as part of their 11:45

25 integration -- as part of our policy to integrate our 11:45

Page 99

CONFIDENTIAL

1 services, we ask them to provide these disclosures. 11:45

2 Q. Would you characterize ads cookie controls 11:45

3 as another way to modify what Google receives? 11:46

4 MR. BROOME: Object to the form. 11:46

5 THE WITNESS: Yes. 11:46

6 BY MR. MAO: 11:46

7 Q. Okay. Other than these five things you've 11:46

8 identified, can you think of anything else from your 11:46

9 declaration? 11:46

10 A. Give me a moment, if that's okay with you. 11:46

11 Q. Of course. Yeah. I'm going through too. 11:46

12 MR. BROOME: And, Mark, when you find an 11:46

13 appropriate stopping point in the next, you know, few 11:46

14 questions or so, we would appreciate that. Maybe we 11:46

15 could stop for lunch briefly. 11:46

16 MR. MAO: I appreciate that. Yeah. 11:47

17 Let's try to get through this. 11:47

18 THE WITNESS: Okay. So I have a few more. 11:47

19 BY MR. MAO: 11:47

20 Q. Okay. Please. Let's add to the list. 11:47

21 A. Okay. So we're spending a lot of time in 11:47

22 the latter portion of the declaration, but I want to 11:47

23 bring it back up to paragraph 3, which is on page 2. 11:47

24 Q. Okay. 11:47

25 A. And so in paragraph 3, we talk about three 11:47

CONFIDENTIAL

1 ways in which incognito mode provides privacy, and in 11:47
2 each of these cases, I think one of these might be -- 11:47
3 we may have talked about before. But all three of 11:47
4 these ways in which incognito mode provides privacy 11:47
5 does in a sense -- you know, I think modifies the way 11:47
6 in which Google interacts with data; right? 11:47

7 Q. Got it. Okay. 11:48

8 A. Right. So I'll just go down the list, if 11:48
9 that's okay with you or -- 11:48

10 Q. Your list is on paragraph 3; right? I'm 11:48
11 trying to get you to lunch. But you're referring to 3 11:48
12 on paragraph 3? 11:48

13 A. Yes. Yes. And so each of the three 11:48
14 benefits which, you know, I think qualify for your 11:48
15 modify -- for this modify test, I think each one of 11:48
16 these three qualify; right? 11:48

17 And so just really briefly, first, the not 11:48
18 recording, so when you're in incognito mode, a user's 11:48
19 browsing history is -- are -- a user's -- the websites 11:48
20 you visit are not saved in the user's Chrome browsing 11:48
21 history. 11:48

22 So that modifies the information that Google 11:48
23 receives. 11:48

24 Secondly, incognito mode automatically logs 11:48
25 user out of their Google account and any other website 11:48

CONFIDENTIAL

1 account, so that also modifies the information that 11:48
2 Google receives on any subsequent visits to any 11:48
3 websites. Similar to but not exactly the same point 11:48
4 as we said with pre-existing cookies. 11:49

5 It also allows you to prevent additional 11:49
6 reception of information about the -- associated with 11:49
7 a user's account; right? 11:49

8 And then lastly, this idea of: 11:49

9 "Chrome does not share any existing 11:49
10 cookies with websites visited and any new 11:49
11 cookies placed on the browser during the 11:49
12 Incognito mode session are deleted once 11:49
13 Incognito mode windows are closed." 11:49

14 So another way in which you -- so when you 11:49
15 visit a website in incognito mode, any of the cookies 11:49
16 from that session are sent to that website when you 11:49
17 interact with it. 11:49

18 By closing the incognito window, the last 11:49
19 incognito window, those cookies are then deleted, and 11:49
20 then on any subsequent visit, that cookie would not be 11:49
21 sent to Google. And so in that sense, Google's 11:49
22 reception of information has been modified. 11:49

23 Q. Appreciate that, Mr. McPhie. 11:49

24 Anything else you can think of from your 11:49
25 declaration? 11:49

Page 102

CONFIDENTIAL

1 So the reason why account creation is not on 12:14
2 that list is because that list of six relates to 12:14
3 collection of data. Remember, that's how we started 12:15
4 compiling the list. What -- what controls or -- I 12:15
5 don't know -- user flow affects whether or not Google 12:15
6 is collecting data on third-party websites that use 12:15
7 Google services? 12:15

8 Do you remember? 12:15

9 Right, right, right. 12:15

10 A. I remember -- 12:15

11 Q. So would you and I agree that account 12:15
12 creation doesn't actually affect whether or not Google 12:15
13 collects data on third-party websites? 12:15

14 Like I don't have to be a Google account 12:15
15 holder for Google to collect data on me on a 12:15
16 third-party website, do I? 12:15

17 MR. BROOME: Object to the form. 12:15

18 THE WITNESS: If a user -- so if a user does 12:15
19 not have a Google account -- and this is part of 12:16
20 what's stated in the declaration; right? 12:16

21 If a Google -- if there is a Google account 12:16
22 holder who is using incognito mode and has not signed 12:16
23 in again, so is not using their Google account, and is 12:16
24 on a third-party website, and that third-party website 12:16
25 has chosen to integrate with Google services such as 12:16

CONFIDENTIAL

1 Ads or Analytics, that information -- there may be 12:16
2 data transmitted to Google. 12:16
3 BY MR. MAO:
4 Q. So I think this is the misalignment. I was 12:16
5 trying to explain -- you were asking me why was the 12:16
6 Google account creation not listed as one of the data 12:16
7 controls? I was trying to explain that like because 12:16
8 it's not a data control. 12:16
9 Let's -- let's set that aside for a moment. 12:16
10 Let's just set that aside for a moment. 12:16
11 A. Okay. 12:16
12 Q. What I'm trying to understand is does Google 12:16
13 use any of these controls which may, you know, affect 12:16
14 whether or not it can collect data as a signal for 12:16
15 whether or not a user has consented? 12:16
16 MR. BROOME: Object to the form. 12:16
17 THE WITNESS: Consented to what? 12:16
18 BY MR. MAO: 12:17
19 Q. Data that Google receives when a user visits 12:17
20 a third-party website that uses Google services. 12:17
21 A. Okay. Yeah. I would not characterize it 12:17
22 that way. 12:17
23 The controls that we offer and the processes 12:17
24 that we've mentioned, they do what they say they do; 12:17
25 right? We -- you know, no -- no more, right, and no 12:17

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1 less. 12:17

2 So when a user says that they want to -- 12:17

3 when a user chooses to turn off third-party cookies, 12:17

4 right, you know, we will -- obviously that 12:17

5 functionality works. What we convey in that control 12:17

6 is exactly what happens. 12:17

7 You go to a third-party website or you go to 12:17

8 any website, any third-party cookies will not be -- 12:17

9 will be blocked; right? 12:17

10 It is not -- it does not connote a signal 12:17

11 around data in general. 12:17

12 Q. Okay. So whether a user turns on or turns 12:18

13 off a data control does not affect whether Google 12:18

14 reads that as consent -- consented or not? 12:18

15 A. I don't think that's characterized 12:18

16 correctly. 12:18

17 Q. Would that -- but that's why I was using 12:18

18 that list; right? 12:18

19 Like that list of six, do any of these, you 12:18

20 know, things that affect whether or not a user's data 12:18

21 is being collected by Google on a third-party website, 12:18

22 do any of those -- are any of those things signals for 12:18

23 consent as you stated in that same sentence? 12:18

24 MR. BROOME: Object to the form. 12:18

25 THE WITNESS: I feel like that -- I feel 12:18

Page 110

CONFIDENTIAL

1 like the summary of the six is mischaracterized, if I 12:18
2 can say that. Like I didn't state that these -- that 12:18
3 many of these things prevent data from being sent or 12:18
4 received. 12:19

5 I thought we had agreed on a term like 12:19
6 modified or affected. 12:19

7 BY MR. MAO: 12:19

8 Q. Okay. Yeah. I use the word "limited" 12:19
9 because your first one was don't use the website. 12:19

10 A. Right. Right. That was one of the ones 12:19
11 that we've mentioned. But in -- 12:19

12 I don't think the -- it would be an 12:19
13 overcharacterization to say that everything on the 12:19
14 list completely prevents any transmission of data to 12:19
15 or from Google. 12:19

16 Q. Okay. So nothing on that list completely 12:19
17 trans- -- stops transmission of the data to Google? 12:19

18 A. I wouldn't say that either. 12:19

19 MR. BROOME: Objection. 12:19

20 BY MR. MAO: 12:19

21 Q. Sorry. I was just -- I'm trying -- I'm 12:19
22 trying to -- that's your statement. 12:19

23 So how would you characterize that list? 12:19

24 And then how does that affect consent? 12:19

25 MR. BROOME: Object to the form. 12:19

Page 111

CONFIDENTIAL

1 part of the obtaining consent to the data Google 12:31
2 receives when a user visits a third-party website that 12:31
3 uses certain Google services. 12:32
4 Is that correct? 12:32
5 MR. BROOME: Object to the form. 12:32
6 THE WITNESS: I wouldn't put it that way. 12:32
7 No. 12:32
8 BY MR. MAO: 12:32
9 Q. Okay. So for these Analytics cookie 12:32
10 on-or-off buttons, what is your team looking for in 12:32
11 terms of the consent user flow? 12:32
12 Are you looking for anything? 12:32
13 MR. BROOME: Object to the form. 12:32
14 THE WITNESS: I don't -- I don't understand 12:32
15 the question, unfortunately. 12:32
16 What are we looking for for what? 12:32
17 BY MR. MAO: 12:32
18 Q. As to whether or not a user has consented to 12:32
19 having their data collected when they're visiting a 12:32
20 third-party website that uses certain Google services. 12:32
21 MR. BROOME: Object to the form. 12:32
22 THE WITNESS: So can you give me like an 12:32
23 example? Like the things that we work on are things 12:32
24 like the account creation flow. And in that account 12:33
25 creation flow, the best signal is to show the user the 12:33

CONFIDENTIAL

1 information; right? The accurate clear information 12:33

2 and ask for a response; right? 12:33

3 The "I agree" button or the "cancel" button, 12:33

4 that is the most important signal. 12:33

5 BY MR. MAO: 12:33

6 Q. Well, I mean, yes and no, right, because 12:33

7 you're looking at your declaration and you were the 12:33

8 one that pointed me to this. 12:33

9 You also say that -- where is that E? -- 12:33

10 you're the one that pointed me to the Google Analytics 12:33

11 terms of service and the Ad Manager publisher policies 12:33

12 that require websites to use, I don't know, certain 12:33

13 disclosures or whatnot. 12:33

14 What I'm asking you is for these cookie 12:33

15 banners, are you looking for any particular signal to 12:34

16 signify whether or not consent has been obtained 12:34

17 pursuant to these policies you're referencing in your 12:34

18 declaration. Specifically, paragraph 81 and 12:34

19 paragraph 84 of your declaration. 12:34

20 MR. BROOME: Object to the form. 12:34

21 THE WITNESS: So I -- I don't consider a 12:34

22 user who chooses to use particular settings that 12:34

23 affect how data may be collected or used to obviate or 12:34

24 otherwise negate their overall agreement to our 12:34

25 privacy policy or terms. 12:34

Page 123

CONFIDENTIAL

1 BY MR. MAO: 12:34

2 Q. Either way, right, like consent or not 12:34

3 consent, it's not an additional consent or not 12:34

4 consent, in your mind? 12:34

5 A. I wouldn't phrase it that way; right? 12:34

6 It's more nuanced than that; right? 12:34

7 I -- all the users that we're talking about 12:34

8 in the course of this declaration, like I said, have 12:34

9 gone through a process by which they consented to the 12:34

10 privacy policy and terms of service. 12:35

11 If there was a way in which they would like 12:35

12 to customize their service by use of additional 12:35

13 controls or options, either provided by Google or a 12:35

14 third party, they're welcome to do so, and they should 12:35

15 expect that those controls abide by what's on the 12:35

16 label. But they will do what they say they do, which 12:35

17 is true, which I have outlined in the declaration. 12:35

18 But it doesn't mean that, for example, if a 12:35

19 user has said, "I want to block third-party cookies," 12:35

20 that somehow that modifies anything else that they 12:35

21 agreed to in the privacy policy or any of the other 12:35

22 provisions. Those still -- from a product 12:35

23 perspective, I consider a user to still be -- to still 12:35

24 be consented. 12:35

25 Q. So even if they turn off Analytics cookie? 12:35

Page 124

CONFIDENTIAL

1 A. In that case, they have agreed to -- they 12:35
2 have agreed to the provisions of that control. It is 12:35
3 not -- it should not be overgeneralized. It should 12:36
4 not be -- it should not be misinterpreted; right? 12:36
5 Like a user who wants to turn off an Analytics cookie, 12:36
6 Analytics cookie should be turned off. 12:36

7 But it would be very difficult and confusing 12:36
8 to a user even if they were using one privacy control, 12:36
9 right, or one -- you know, one switch, and a bunch of 12:36
10 other things happen; right? 12:36

11 Q. Oh, okay. So that -- 12:36

12 A. That's why we want these things to do what 12:36
13 they say they do. 12:36

14 Q. So then maybe shortcutting this, you also 12:36
15 reference incognito mode as a fourth one, fifth one is 12:36
16 Ads cookie, on or off, and then also the -- lastly the 12:36
17 different ways in which incognito mode was supposed to 12:36
18 operate as your sixth. 12:36

19 These are again things that may affect what 12:36
20 is collected by a limiting, but you don't want it to 12:36
21 be overly interpreted. 12:37

22 Is that fair? 12:37

23 MR. BROOME: Object to the form. 12:37

24 THE WITNESS: There are many things in your 12:37
25 question, unfortunately, I don't agree with the 12:37

Page 125

CONFIDENTIAL

1 phrasing; right? 12:37

2 I mean, incognito does what incognito says. 12:37

3 Not supposedly. It definitely does. That's the 12:37

4 purpose of my -- or some of the purpose of my 12:37

5 declaration. It definitely does what it says it does, 12:37

6 and we do all that we can to convey that to users in 12:37

7 many different ways. 12:37

8 BY MR. MAO: 12:37

9 Q. Let's get a little bit specific because I 12:37

10 think this will help. 12:37

11 Going to your declaration, paragraphs 81 12:37

12 and 84, okay, you talk about these additional 12:37

13 Google Analytics Terms of Service and Ad Manager 12:37

14 Publisher Policies that your team helped roll out. 12:37

15 First of all, my question is when were these 12:37

16 policies rolled outside, do you know? 12:37

17 A. I don't know. 12:37

18 Q. Do you know if they were rolled out before 12:37

19 or after June 17, 2019? 12:38

20 A. Sitting here right now, I don't know. 12:38

21 Q. At the time in which you wrote this 12:38

22 declaration, did you know when these policies actually 12:38

23 rolled out? 12:38

24 A. I was not aware of a specific date. 12:38

25 Q. You were not aware of a specific date then 12:38

Page 126

CONFIDENTIAL

1 when you wrote the declaration as to when these rolled 12:38
2 out? 12:38
3 A. Yes. 12:38
4 Q. You mean "No"? "No," you're not? 12:38
5 A. I mean, yes, as in like I was not -- when 12:38
6 the declaration was written, I did not have an exact 12:38
7 knowledge of the history of all of these, nor was I 12:38
8 actually -- I should say nor was I intending to convey 12:38
9 a history of the publication of all of these policies, 12:38
10 but rather was intending -- by preparing and -- 12:38
11 preparing this declaration, was intending to convey 12:38
12 what the -- you know, what our policies, you know -- 12:38
13 what they are, what the substance of them are and what 12:39
14 that means; right? 12:39
15 Q. Got it. Got it. 12:39
16 So let me ask you this. Okay? 12:39
17 For these policies where you're talking 12:39
18 about how you must disclose the use of 12:39
19 Google Analytics on a -- okay -- and how -- the 12:39
20 privacy policy under the website for the Ad Manager, 12:39
21 right, if used, must disclose certain things. 12:39
22 My question to you is: How does Google make 12:39
23 sure that these policies were complied with? 12:39
24 A. So enforcement of the policies is outside 12:39
25 the scope of what I prepared as part of the 12:39

Page 127

CONFIDENTIAL

1 "Neither of these sentences should be 01:17
2 interpreted to mean that Incognito mode 01:17
3 prevents Google from collecting the data 01:17
4 that the Privacy Policy makes clear Google 01:17
5 receives to provides its analytics and 01:17
6 advertising services." 01:17

7 What is the basis for your interpretation or 01:17
8 your -- your interpretation of how those sentences 01:17
9 should be interpreted? 01:18

10 I'm speaking specifically about your 01:18
11 paragraph 30, by the way. Just because, you know, 01:18
12 there are a lot of references you heard. I just want 01:18
13 to make sure we're talking about the same paragraph. 01:18

14 A. Absolutely. 01:18

15 Q. Yeah. 01:18

16 A. So it goes back to this principle that I've 01:18
17 spoken about before which is that things do what they 01:18
18 say they do; right? They don't do what they don't say 01:18
19 they do. 01:18

20 And we -- you know, in making something as 01:18
21 clear and as understandable as possible, you know, 01:18
22 it's good as a general principle tool to avoid, you 01:18
23 know -- you know, you force people to make 01:18
24 assumptions, right, about things that aren't 01:18
25 explicitly stated; right? 01:18

Page 148

CONFIDENTIAL

1 And so the idea here is that we have a 01:18
2 privacy policy. It is in effect. 01:18

3 Unless we stated something explicitly about 01:18
4 how incognito mode changes those modes -- or changes 01:18
5 those practices, then -- then they would still apply. 01:18

6 If we had to list all the things that didn't 01:19
7 happen, that would be an infinite list. If we had to 01:19
8 say here are all the things that don't affect our 01:19
9 privacy policy, that would be an infinite list; right? 01:19

10 You know, here's -- here are all the things 01:19
11 that wouldn't affect whether or not data is collected 01:19
12 when you visit a third-party site that chooses to 01:19
13 integrate with Google Analytic Services. That list 01:19
14 would be too long. That would actually make it harder 01:19
15 to understand. And we strive really hard to make the 01:19
16 privacy policy as clear and understandable as possible 01:19
17 for our users. 01:19

18 Q. Okay. So do you think that either of these 01:19
19 sentences you're referring to -- or sorry. Well, I 01:19
20 would say either of these sets of sentences that 01:19
21 you're referring to in paragraph 30, do you think any 01:19
22 of those sentences are vague? 01:19

23 A. No. 01:19

24 Q. I am going to put into Exhibit, 01:19
25 Exhibit No. 5. 01:20

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1	(Exhibit 5 was marked for	01:20
2	identification.)	01:20
3	BY MR. MAO:	01:20
4	Q. When you have a copy, let me know -- sorry.	01:20
5	When you see the copy on your side, let me know.	01:20
6	A. Just appeared and I have it open.	01:20
7	Q. Are you familiar with this e-mail?	01:20
8	A. Let me read it first.	01:20
9	Is that okay?	01:20
10	Q. Of course. Of course. Please.	01:20
11	A. Okay. I've read the whole thing.	01:21
12	Q. Okay. You see -- you received this e-mail	01:21
13	at some point -- at some point in your course of your	01:21
14	role at Google.	01:21
15	Isn't that correct?	01:21
16	A. This appears to be true. I would need to	01:21
17	verify it internally before stating confidently that	01:21
18	this is an authentic e-mail.	01:21
19	Q. Looking on the second page, third bullet	01:21
20	down -- I'm sorry -- fourth bullet down.	01:21
21	"Users overestimate the protections	01:22
22	that Incognito provides and are unaware of	01:22
23	the personalization and data collection	01:22
24	that occurs when it is on."	01:22
25	Do you see that there?	01:22

Page 150

CONFIDENTIAL

REPORTER'S CERTIFICATE

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STATE OF CALIFORNIA)
) ss.

COUNTY OF YOLO)

I, KATY E. SCHMIDT, a Certified Shorthand
Reporter in and for the State of California, duly
commissioned and a disinterested person, certify:

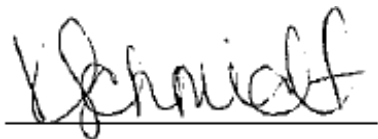
That the foregoing deposition was taken before
me at the time and place herein set forth;

That JONATHAN MCPHIE, the deponent herein, was
put on oath by me;

That the testimony of the witness and all
objections made at the time of the examination were
recorded stenographically by me to the best of my
ability and thereafter transcribed into typewriting;

That the foregoing deposition is a record of
the testimony of the examination.

IN WITNESS WHEREOF, I subscribe my name on this
21st day of February, 2023.



Katy E. Schmidt, RPR, RMR, CRR, CSR 13096
Certified Shorthand Reporter
in and for the
County of Sacramento,
State of California
Ref. No. 5768672 KES

Page 192

EXHIBIT 64

10/24/22 *Calhoun* Hearing Transcript Excerpts

UNITED STATES DISTRICT COURT **CERTIFIED COPY**

NORTHERN DISTRICT OF CALIFORNIA

Before The Honorable YVONNE GONZALEZ ROGERS, Judge

PATRICK CALHOUN, et al., on)	Evidentiary Hearing
behalf of themselves and all))	
others similarly situated,)	Pages 1 - 271 and
)	321 - 330
Plaintiffs,)	
)	
vs.)	NO. C 20-05146 YGR
)	
GOOGLE LLC,)	
)	
Defendant.)	Oakland, California
_____)	Monday, October 24, 2022

REPORTER'S TRANSCRIPT OF PROCEEDINGS

APPEARANCES:

For Plaintiffs:	Simmons Hanly Conroy LLC 112 Madison Avenue, Seventh Floor New York, New York 10016
BY:	JAY BARNES, JENNIFER M. PAULSON, AN V. TRUONG, ATTORNEYS AT LAW
	Bleichmar Fonti & Auld LLP 555 12th Street, Suite 1600 Oakland, California 94607
BY:	ANGELICA M. ORNELAS, LESLEY E. WEAVER, ATTORNEYS AT LAW

Reported By: Raynee H. Mercado, CSR No. 8258

Proceedings reported by electronic/mechanical stenography;
transcript produced by computer-aided transcription.

A P P E A R A N C E S (CONT'D.)

For Plaintiffs: DiCello Levitt LLC
60 East 42nd Street, Suite 2400
New York, New York 10165
BY: DAVID A. STRAITE, ATTORNEY AT LAW

DiCello Levitt (IL)
DiCello Levitt LLC
Ten N. Dearborn Street, 6th Floor
Chicago, Illinois 60601
BY: SHARON D. CRUZ, ATTORNEY AT LAW

For Defendant: Quinn Emanuel Urquhart & Sullivan LLP
191 North Wacker Drive, Suite 2700
Chicago, Illinois 60606
BY: ANDREW H. SCHAPIRO,
JOSEPH H. MARGOLIES, ATTORNEYS AT LAW

Quinn Emanuel Urquhart & Sullivan LLP
865 S. Figueroa Street, Floor 10
Los Angeles, California 90017
BY: STEPHEN A. BROOME,
ALYSSA G. OLSON,
VIOLA TREBICKA, ATTORNEYS AT LAW

Quinn Emanuel Urquhart & Sullivan LLP
1300 I Street N.W
Washington, D.C. 20005
BY: JOSEF T. ANSORGE, ATTORNEY AT LAW

Quinn Emanuel Urquhart & Sullivan LLP
711 Louisiana Streeet, Suite 500
Houston, Texas 77002
BY: BRETT N. WATKINS, ATTORNEY AT LAW

Quinn Emanuel Urquhart & Sullivan LLP
51 Madison Avenue, 22nd Floor
New York, New York 10010
BY: JOMAIRE A. CRAWFORD, ATTORNEY AT LAW

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I N D E X

	<u>PAGE</u>	<u>VOL.</u>
OPENING STATEMENT BY MR. SCHAPIRO	14	1
OPENING STATEMENT BY MR. BARNES	22	1
CLOSING ARGUMENT BY MR. SHAPIRO	321	1
CLOSING ARGUMENT BY MR. BARNES	325	1

DEFENDANT'S WITNESSES

	<u>PAGE</u>	<u>VOL.</u>
ZERVAS, GEORGIOS		
DIRECT EXAMINATION BY MS. TREBICKA	27	1
VOIR DIRE EXAMINATION BY MR. BARNES	33	1
DIRECT EXAMINATION (RESUMED) BY MS. TREBICKA	35	1
CROSS-EXAMINATION BY MR. BARNES	87	1
REDIRECT EXAMINATION BY MS. TREBICKA	132	1
SHAFIQ, ZUBAIR		
EXAMINATION BY THE COURT	80	1
BERNTSON, GLENN		
DIRECT EXAMINATION BY MR. BROOME	135	1
CROSS-EXAMINATION BY MR. BARNES	149	1

DEFENDANT'S WITNESSES**PAGE****VOL.**

GANEM, STEVEN

DIRECT EXAMINATION BY MR. WATKINS

155

1

CROSS-EXAMINATION BY MS. TRUONG

163

1

REDIRECT EXAMINATION BY MR. WATKINS

169

1

PORTER FELT, ADRIENNE

DIRECT EXAMINATION BY MS. CRAWFORD

170

1

CROSS-EXAMINATION BY MS. ORNELAS

187

1

FAIR, GREGORY

DIRECT EXAMINATION BY MR. BROOME

192

1

CROSS-EXAMINATION BY MR. STRAITE

197

1

REDIRECT EXAMINATION BY MR. BROOME

212

1

KLEBER, MICHAEL

DIRECT EXAMINATION BY MS. TREBICKA

214

1

CROSS-EXAMINATION BY MR. BARNES

228

1

REDIRECT EXAMINATION BY MS. TREBICKA

240

1

CROSS-EXAMINATION BY MR. BARNES

243

1

PLAINTIFFS' WITNESSES**PAGE****VOL.**

SMITH, RICHARD

DIRECT EXAMINATION BY MS. TRUONG

246

1

CROSS-EXAMINATION BY MR. SMITH

263

1

SHAFIQ, ZUBAIR (UNDER SEAL)

DIRECT EXAMINATION BY MR. BARNES

272

1

DIRECT EXAM (RESUMED) BY MR. BARNES

297

1

CROSS-EXAMINATION BY MR. SCHAPIRO

305

1

REDIRECT EXAMINATION BY MR. BARNES

319

1

E X H I B I T S**PLAINTIFFS' EXHIBITS****W/DRAWN****IDEN****EVID****VOL.**

B149

248

1

B153

97

1

154

111

1

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1 Q. In particular, Dr. Zervas, you testified at the beginning
2 that you've also reviewed and have attempted to answer the
3 Court's question as to the browser-agnostic nature of the
4 collection of the at-issue data.

5 How did you go about reviewing and analyzing the Court's
6 question?

7 A. I did a couple of things. First I analyzed the named
8 plaintiffs' data.

9 (Demonstrative published.)

10 THE WITNESS: And second, I conducted some original
11 testing of my own in different browser configurations.

12 BY MS. TREBICKA:

13 Q. So in terms of analyzing the names -- the named
14 plaintiffs' data, could you please tell the Court what you
15 did, what you looked at, and how you reviewed it?

16 (Demonstrative published.)

17 THE WITNESS: Of course.

18 So Google produced approximately 80 gigabytes of log
19 files. So log files, think of them, Your Honor, just like an
20 Excel file with rows that describe different events, and
21 columns that have different data types, that are keyed to
22 plaintiffs' Google accounts.

23 So my understanding is that the named plaintiffs were
24 logged in when they were using -- for the purpose of that
25 data.

1 Plaintiffs used different browsers to interact with Google
2 third-party services, including Chrome, Safari, Edge, Firefox.
3 And when they visited sites other than Google properties,
4 these log files contained the data that Google received from
5 these interactions with third-party services.

6 **BY MS. TREBICKA:**

7 **Q.** When you analyzed this data, what did you find?

8 (Demonstrative published.)

9 **THE WITNESS:** I will give you a high-level overview.

10 And we examine -- I examined this question from different
11 vantage points, but essentially the at-issue data, the
12 categories of which I describe here, is transmitted to
13 Google -- to Google services and is found in these logs
14 regardless of the browser that the named plaintiffs are using.

15 Here I have an example specifically for Dr. Wilson.

16 **BY MS. TREBICKA:**

17 **Q.** It shows that there is no Firefox data. Do you see that?

18 **A.** I do see that.

19 **Q.** And how is that? Why is that?

20 **A.** It -- it's slightly subtle. It says there is no Firefox
21 data corresponding to visits on non-Google sites. So I
22 remember, for instance, Dr. Wilson visited YouTube, but that's
23 a Google property so I noted for the purposes of my analysis.

24 **Q.** So in other words, it simply means that there was no
25 Firefox data available for you to review?

1 **A.** In that particular log file, no, there wasn't.

2 **Q.** How did you go about putting this summary slide together?

3 **A.** It's best illustrated through an example, if I may. So I
4 will move to the next slide.

5 (Demonstrative published.)

6 **THE WITNESS:** So this is a visit that Dr. Wilson did
7 using the Safari browser to the website that I present here on
8 the slide. That's on the left. And then as a consequence of
9 that visit, Dr. Wilson interacted with Google third-party
10 services.

11 And then when I look at the log files, I noticed that the
12 following items were logged for Dr. Wil -- for that specific
13 interaction: The IP address, the user agent, the cookie
14 identifier, and the URL of the site that Dr. Wilson was
15 visiting.

16 **BY MS. TREBICKA:**

17 **Q.** Here you had three pieces of the data, Dr. Zervas. Why is
18 it that the POST content is missing, POST communication,
19 rather?

20 **A.** There was nothing in his log file that could tell me
21 whether something was a GET or a POST. So it did not allow me
22 this granularity for my analysis.

23 **Q.** And the X-Client Data Header is missing as well. How do
24 you explain that?

25 **A.** I have a very easy explanation. Dr. Wilson was using

1 Safari in that particular case.

2 Q. And why does that explain the missing X-Client Data
3 Header?

4 A. Because only Chrome uses the X-Client Data Header.

5 Q. Dr. Zervas, what conclusion do you draw as a result of
6 this analysis that you've performed?

7 A. Well, I think this analysis informs the question of
8 whether data collection is browser-agnostic. Because when I
9 look at this example, or a similar example with Edge, or yet
10 another example with Edge for a different named plaintiff,
11 these categories of at-issue data were indeed collected by
12 Google third-party services.

13 Q. You testified that you -- and --

14 THE COURT: Is the term "user agent" a technical
15 term?

16 THE WITNESS: Yes, Your Honor. It simply means what
17 sort of program or software you're using to interact with a
18 website. And it's a technical term.

19 THE COURT: Go ahead.

20 MS. TREBICKA: May I continue?

21 Q. Dr. Zervas, you testified that in addition to analyzing
22 the named plaintiffs' data, you also conducted some browsing
23 testing, browser testing; is that right?

24 (Demonstrative published.)

25 THE WITNESS: This is right. I did some testing of

1 my own. And I recorded HTTP transmissions from the browser to
2 Google servers under two different segments.

3 And let me slow down here. So, first, I configured other
4 browsers to behave a bit more similar to Chrome with respect
5 to tracking. And in a separate test, I configured Chrome to
6 behave a bit more similar to other browsers, again with
7 respect to tracking.

8 **BY MS. TREBICKA:**

9 **Q.** Let's move to the next slide, and perhaps you can explain
10 to the Court what -- the next slide.

11 (Demonstrative published.)

12 **THE WITNESS:** My apologies.

13 **BY MS. TREBICKA:**

14 **Q.** One more -- yes, let's rest here.

15 Perhaps you could explain to the Court what this
16 slide shows.

17 **A.** I would be happy to.

18 So, Your Honor, the rows in this table are different
19 categories of at-issue data.

20 The columns in the table represent different browsers and
21 their respective configurations.

22 For instance, column 1 is Chrome in its -- is Chrome in
23 its default setting. And column 2 is Safari with intelligent
24 tracking protection [sic] disabled.

25 Wherever I show a checkmark, it means that I observed the

1 transmission of this category of at-issue data to a Google
2 third-party service.

3 **Q.** Let's move to -- not the next slide, the one after that.
4 What is it that you tested here?

5 **A.** So this refers to my second test where I configured Chrome
6 to be a bit more similar to other browsers.

7 If you remember, Your Honor, I mentioned this extension
8 uBlock Origin. So this is what I used to block communications
9 with DoubleClick and Google Analytics in this particular case.

10 In this example, I did not observe the at-issue data, the
11 categories of at-issue data being transmitted when I was using
12 Chrome. I did observe these transmissions when I was using
13 the other browsers.

14 **Q.** In your testing of the browser transmissions, did you also
15 have occasion to compare Chrome in its default mode versus the
16 other browsers in their default mode?

17 **A.** Yes, and I regret not putting them in the same slide.

18 But, Your Honor, I will animate for you.

19 So if you look at this slide at the last three columns,
20 they show you whether the transmission of at-issue data
21 happened for Safari, Firefox, and mention their default
22 settings. And if I scroll two slides back, and you focus on
23 the first column, it includes data, it includes the analysis
24 for Chrome in its default setting. And I arrive at the same
25 conclusion.

1 Q. And what is that conclusion, Dr. Zervas?

2 A. My apologies. The conclusion is that -- to answer your
3 question, when you look at browsers in their default settings,
4 these categories of at-issue data are transmitted to Google
5 third-party services.

6 Q. Let us focus on Slide 67. That's fine, wherever we are,
7 67 is good.

8 (Demonstrative published.)

9 **BY MS. TREBICKA:**

10 Q. And I'd like to draw your attention to the very last row,
11 cookie valleys. Do you see that?

12 A. I do see that.

13 Q. What kind -- does this contain both first-party and
14 third-party cookies?

15 A. It's even more specific than that. A cookie might be
16 first party or third party, but it's still a cookie. And also
17 cookies can be transmitted via cookie header. Or occasionally
18 they can be appended, added if you will, at the end of a URL
19 as a so-called URL parameter.

20 Q. And why did you look at this category as cookie values
21 instead of separating it out as first-party cookies or
22 third-party cookies?

23 A. This was my best understanding of the at-issue data and
24 what I read in the court order. So that's what it says.

25 Q. Are you aware of any browser in its default mode blocking

1 first-party cookies being transmitted?

2 **A.** Without any changes, not that I know of.

3 **Q.** And you have tested this, correct?

4 **A.** It's such common knowledge that I have not done a specific
5 test to that. But I have never seen first-party cookies being
6 blocked in a default setting.

7 **Q.** But in your testing, have you observed first-party cookies
8 being passed even in a browser's default mode?

9 **A.** I have.

10 **Q.** So on the basis of these tests that you've conducted, how
11 would you respond to the Court's question about whether the
12 at-issue data collection is browser-agnostic?

13 (Demonstrative published.)

14 **THE WITNESS:** I would respond affirmatively, meaning
15 that the question is whether the collection -- data collection
16 by Google third-party services is browser-agnostic, which I
17 understand to mean does it depend on what browser you're
18 using. And when I use different browsers, I saw the same
19 transmissions. So to me, this is browser-agnostic.

20 **BY MS. TREBICKA:**

21 **Q.** Dr. Zervas, your last assignment, your third assignment,
22 was to review Dr. Shafiq's analysis and opine on it, you
23 testified earlier, right?

24 **A.** Yes, I had occasion to do that.

25 **Q.** Yeah. And what are -- what are your response -- or

1 opinions on Dr. Shafiq's testing?

2 **A.** I have a number of opinions. Some of them are slightly
3 more technical so I will try to present them clearly and
4 slowly but --

5 (Demonstrative published.)

6 **THE WITNESS:** -- at a high level, one difficulty that
7 I had with Dr. Shafiq's analysis is that there is no disclosed
8 methodology.

9 And this, Your Honor, for instance, in scientific papers
10 is very common to know how data is collected.

11 **THE COURT:** Slow down.

12 **THE WITNESS:** I'm so sorry.

13 **THE COURT:** Go ahead.

14 **THE WITNESS:** For instance, there was no
15 documentation, there were no videos or code outlining the data
16 collection.

17 And why is that important, Your Honor? It is important
18 because sometimes we want to reintroduce each other's work and
19 be sure that we don't have any mistakes. We all make
20 mistakes.

21 In addition, it's not specified what the state of the
22 browsers was during testing. It's unclear, and I will get
23 into that in a bit more detail, where the page is fully
24 loaded.

25 You remember, Your Honor, how I said it's like a puzzle?

1 at Dr. Shafiq's data and I'm applying my methodology. And I
2 compare Chrome to other browsers configured to behave a bit
3 more like Chrome. And in all instances, I observed the
4 transmissions of at-issue data to Google third-party services.

5 **BY MS. TREBICKA:**

6 **Q.** And if we move on to the next slide, 84, what have you --
7 what have you analyzed and what does it show?

8 (Demonstrative published.)

9 **THE WITNESS:** Now, Your Honor, I'm going back to my
10 data set. And I'm not doing that to confuse anyone. I'm
11 doing it because the counts in Dr. Shafiq's data I think are
12 incorrect.

13 So when I look at counts, as Dr. Shafiq prefers, and I
14 look at the categories of at-issue data as he defines them,
15 broadly the picture is the same except, of course, for
16 X-Client Data which is not transmitted by other browsers.

17 **BY MS. TREBICKA:**

18 **Q.** And moving on to the next slide, 85, same exercise. Will
19 you please tell us which data set you've analyzed and what the
20 conclusions are?

21 (Demonstrative published.)

22 **THE WITNESS:** So again I'm looking at Dr. Shafiq's
23 data. And in this particular case, I'm comparing Chrome with
24 third-party cookie enabled, so third-party cookies are blocked
25 to other browsers in their default configurations.

1 And you know, by now this is a familiar picture. You can
2 see that the categories of at-issue data are transmitted for
3 all browsers in their respective configurations to Google
4 third-party services.

5 **BY MS. TREBICKA:**

6 **Q.** And the next slide, could you please explain to us what
7 data set and what conclusion.

8 (Demonstrative published.)

9 **THE WITNESS:** I promise I think that's the last one I
10 have on that analysis. So here I have used the corrected
11 counts that I collected, my own data set, Your Honor.

12 And again, the takeaway from all these numbers is that
13 when you fix the data collection and you make this comparison,
14 the numbers appear far more similar than what might have been
15 indicated in the report that I read.

16 **BY MS. TREBICKA:**

17 **Q.** So now we've looked at three different comparisons. All
18 browsers in default mode. Chrome in default with other
19 browsers' protections removed or disabled. And thirdly,
20 Chrome with third-party cookie blocking on and the browser's
21 in default mode.

22 What do these three comparisons tell you?

23 (Demonstrative published.)

24 **THE WITNESS:** I would add one more comparison, that
25 we have looked at both with data I collected and data

1 Dr. Shafiq collected. And when you look at those data sets,
2 you arrive at the conclusion that the transmissions of these
3 categories of at-issue data happen regardless of what browser
4 you might be using.

5 And it goes back to your point about what is my
6 fundamental disagreement with Dr. Shafiq. In a sense things
7 of commonality, we observe those same transmissions, but our
8 data collection methodology are different.

9 **BY MS. TREBICKA:**

10 **Q.** Now what would happen if a browser, in its default mode,
11 blocked all transmissions to any Google domain?

12 We can look at Slide 89 perhaps.

13 (Demonstrative published.)

14 **THE WITNESS:** Of course.

15 Well, obviously those transmissions would not happen, but
16 the material consequence that a user using a website that
17 utilizes Google services would be that these Google services
18 would not appear on the page. They would not work.

19 An example is I told you that I started consumer reviews.
20 I've used Yelp a lot. So here I'm showing you Yelp. It shows
21 you restaurant reviews for both the restaurants and a map of
22 Boston so you can find those restaurants. That's on the left.

23 If I block transmissions to Google, the map will not
24 render and you will not be able to see those -- the location
25 of those restaurants, which is what Yelp intended you to see.

1 **BY MS. TREBICKA:**

2 **Q.** Are you aware of any browser that in its default mode
3 blocks all transmissions to all Google domains?

4 **A.** No. No. Unless you're sitting behind a firewall that
5 blocks transmissions to Google. But the browser wouldn't do
6 that, no.

7 **Q.** Let's move to the next slide.

8 Obviously we know Chrome is manufactured by Google. Are
9 there any reasons that a Chrome browser will send
10 transmissions back to the manufacturer for reasons other
11 than -- or are there any -- are there reasons other than
12 communicating with Google for third-party services
13 transmissions that a browser may want to communicate with its
14 manufacturer?

15 **A.** Of course. A common reason is to receive security
16 updates, patches, upgrades to functionality. So all browsers
17 and many pieces of software do that.

18 (Demonstrative published.)

19 **BY MS. TREBICKA:**

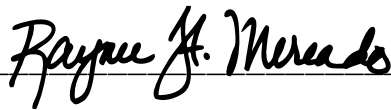
20 **Q.** And are you aware of other browsers, in their -- if you
21 use them not synced, sending transmissions back to their
22 manufacturer even when they are not visiting websites of that
23 manufacturer?

24 **A.** Yes.

25 Your Honor, remember when you asked me why I'm telling you

CERTIFICATE OF REPORTER

I certify that the foregoing is a correct transcript from the record of proceedings in the above-entitled matter. I further certify that I am neither counsel for, related to, nor employed by any of the parties to the action in which this hearing was taken, and further that I am not financially nor otherwise interested in the outcome of the action.



Raynee H. Mercado, CSR, RMR, CRR, FCRR, CCRR

Friday, October 28, 2022

EXHIBIT 65

Brown Google Subscriber Information

Sealed Entirely

EXHIBIT 66

Byatt Google Subscriber Information

Sealed Entirely

EXHIBIT 67

Castillo Google Subscriber Information

Sealed Entirely

EXHIBIT 68

Davis Google Subscriber Information

Sealed Entirely

EXHIBIT 69

Trujillo Google Subscriber Information

Sealed Entirely

EXHIBIT 70

Log Data Usage Rules

Sealed Entirely

EXHIBIT 71

Device/App/ Browser Fingerprinting and Immutable Identifiers Policy

Sealed Entirely

EXHIBIT 72

**Incognito
Screen GOOG-
CABR-04400003**

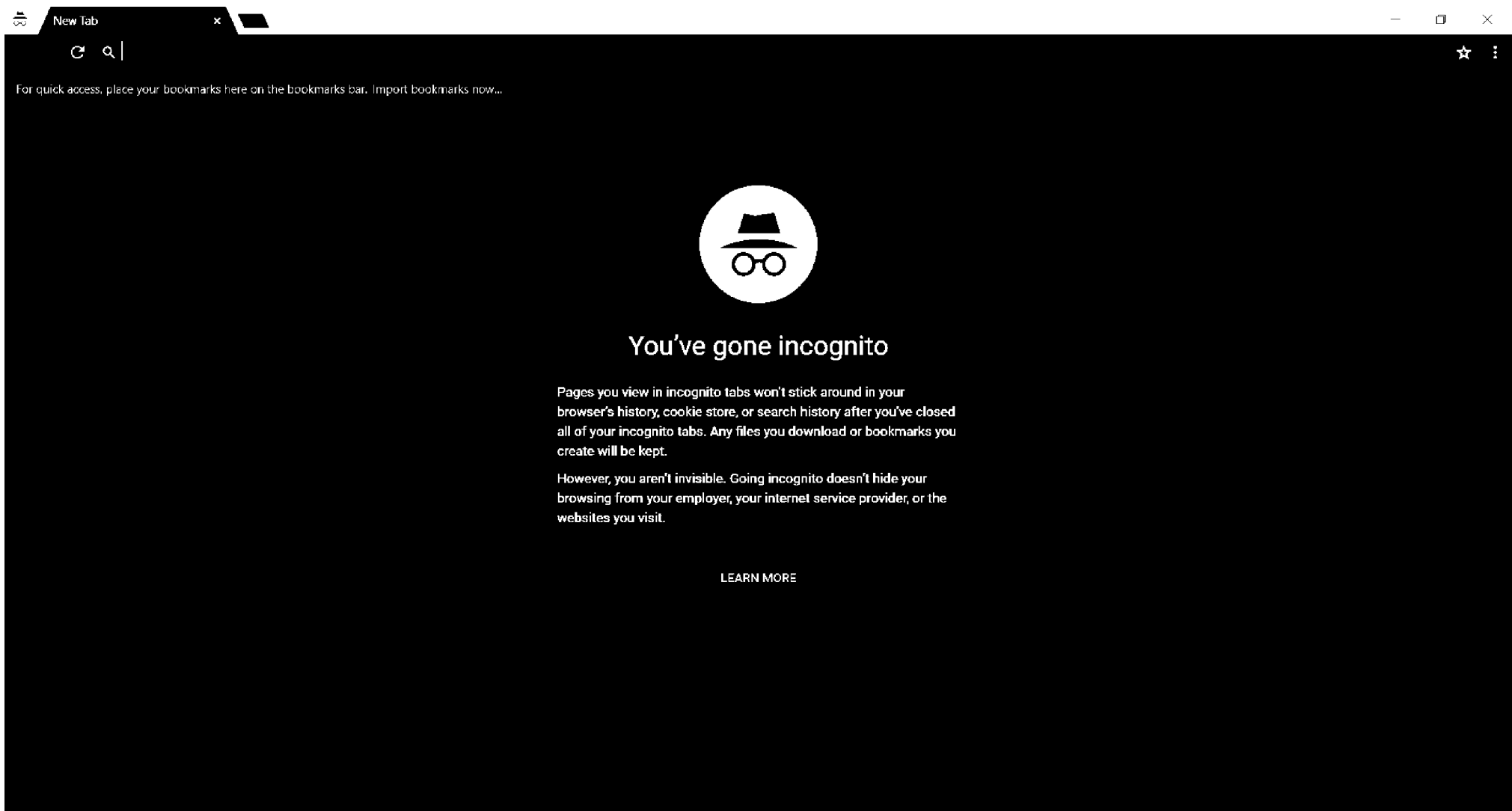


EXHIBIT 73

**Incognito
Screen GOOG-
CABR-04400005**

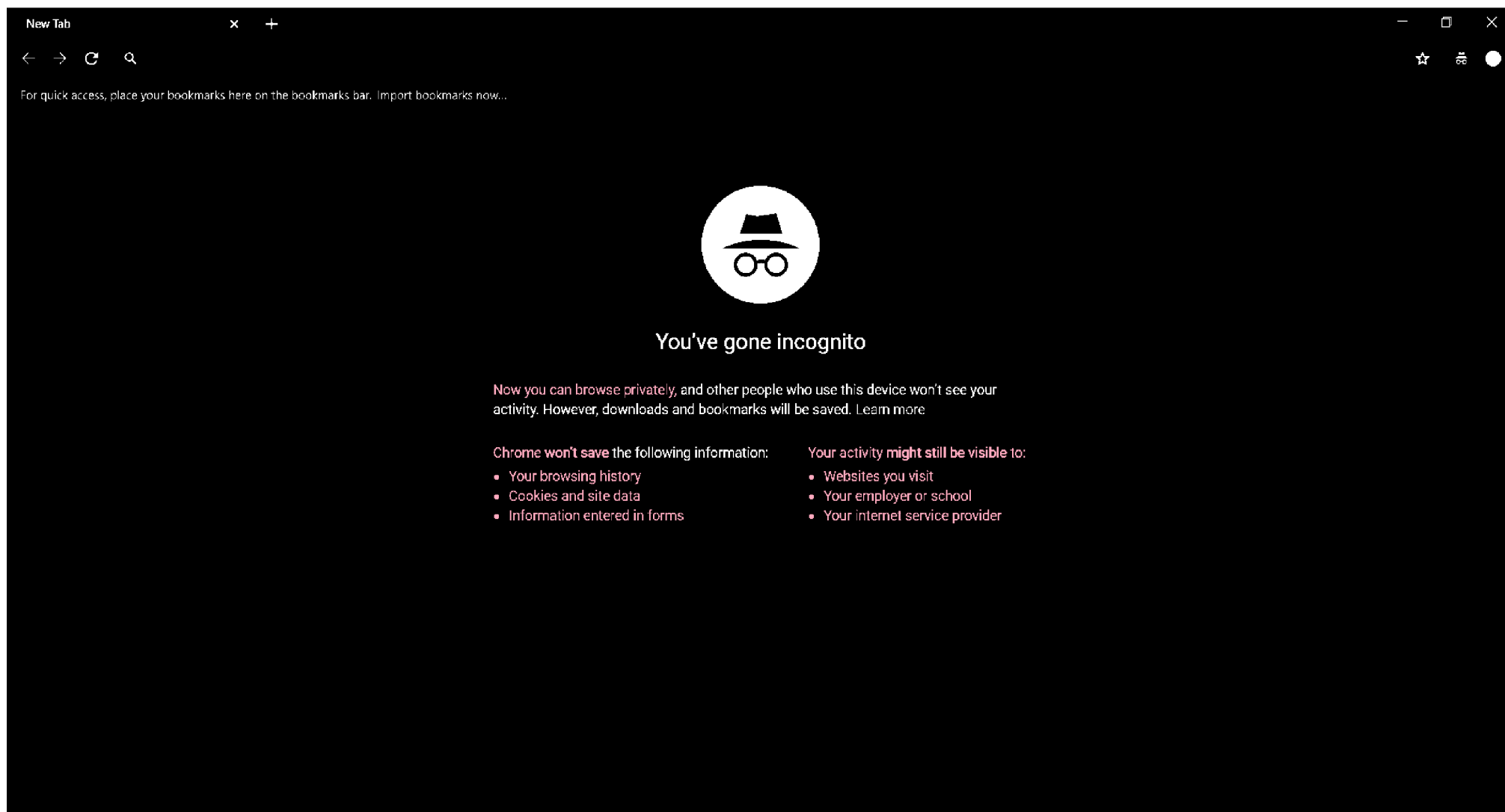


EXHIBIT 74

**Incognito
Screen GOOG-
CABR-04400007**

